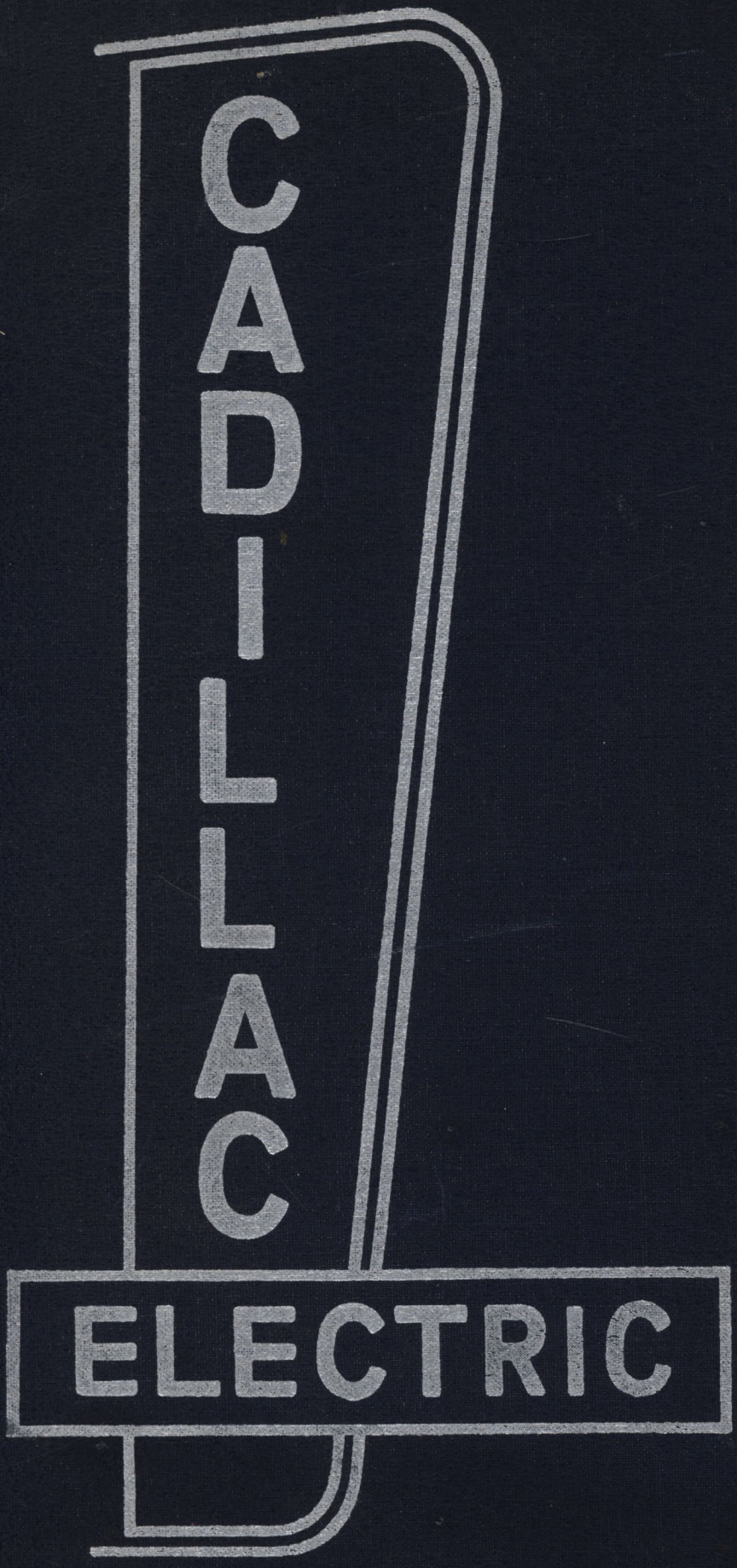


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USEFUL INFORMATION ▶

ELEC. CODE INFO 151-16
MOTORS DATA 280-292
LIGHTING INFO 429-441
GENERAL INFO 442-447

● This Catalog is dedicated to the service of our customers and all those who are interested in obtaining information on, or delivery of, all classes of dependable

ELECTRICAL EQUIPMENT and SUPPLIES

● We carry in stock and can furnish many items not shown in this catalog and invite your inquiries for further details regarding any electrical materials you may need.

GENERAL INFORMATION

This catalog is designed not merely to show the material we handle, but to serve as a reference book of electrical supplies that will prove to be of real value in illustrating and describing material for which there is an active demand.

As distributors, we believe we should serve not only as an efficient source of supply but also render assistance to our customers through merchandising cooperation and technical assistance. Our organization has a background of long experience and service rendered, and stands ready to cooperate with you in every way.

The groupings and classifications of material in our catalog have been arranged to speed the selection of the goods you want. A large well assorted stock, housed in a modern wholesale plant, manned by well trained personnel assures the prompt handling and delivery of your order.

It is impossible to show each and every line that we distribute and all the lines that we carry in stock. If you are unable to find in the catalog some particular item or brand name you require, please call us. We are sure we can help you.

We are illustrating in this catalog a representative line of lighting fixtures and accessories. We are also distributors for many lighting lines other than those shown. We invite your inquiries and will be glad to send you brochures or a composite lighting hand book.

TERMS

Our regular terms apply to firms of satisfactory credit rating who qualify as being entitled to wholesale prices. All orders from firms unknown to us, or not rated, should be accompanied by proper reference or remittance.

PRICES

When it was compiled, the prices in this catalog agreed with the latest correct prices. However, they are subject to market changes without notice, and are not offered as quotations.

SHORTAGE

All claims for shortage must be made immediately upon receipt of material, by letter, enclosing packing memorandum.

MATERIAL NOT SHOWN

We are prepared to quote prices and submit data on any materials or equipment not shown in this catalog.

Compiled and Published

by

The Howland Publishing Company, Inc.

54 Shrewsbury Ave.

Red Bank, N. J.

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SECTION 1

CONDUIT • FITTINGS • BOXES LUGS and CONNECTORS

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RIGID, E. M. T. AND FLEXIBLE CONDUIT

RIGID STEEL CONDUIT

GALVANIZED AND LACQUER FINISHED CONDUIT — ALSO MADE IN BLACK ENAMELED FINISH

(Couplings and Elbows)

Galvanized and lacquered finish and black enameled rigid steel conduits are produced in a modern conduit plant, staffed with men of high ability and long experience in the manufacture and installation of rigid conduit. Every length is subject to a thorough scouring and pickling in acid, leaving the pipe perfectly clean, free from all scale and ready for the application of the protective zinc or enamel coating. Underwriters' Laboratories, Inc., label on each unit.

CONDUIT COUPLINGS AND ELBOWS are made Hot-Dipped Galvanized or Black Enameled and furnished in sizes up to and including 6 inch.

We are also prepared to furnish special radius elbows. Prices quoted on application.

THIN WALL CONDUIT

Threadless

Electric metallic thin wall conduit is produced from flat cold rolled steel. It is welded by the oxy-acetylene method giving a perfectly true tube of uniform thickness and strength. The tubing is threadless and much lighter in weight than heavy wall conduit.

The National Electrical Code approves this material up to and including the 2" trade size for use on circuits where the conductor size does not exceed No. 1/0 and where the voltage does not exceed 600 volts. Comes in full 10 ft. lengths. No couplings.

Trade Size Inches	Internal Diameter in Inches	External Diameter in Inches	Feet Per Bundle	Approx. Weight 1,000 Ft.	90° Elbows W/out Coup. Wt. Lbs. Per 100
½	.622	.706	100	321	.....
¾	.824	.922	100	488	.....
1	1.049	1.163	100	711	100
1¼	1.380	1.508	50	1000	144
1½	1.610	1.738	50	1180	180
2	2.067	2.195	.....	1500	277

FLEXIBLE STEEL CONDUIT

Flexible steel conduit offers mechanical protection and resistance to corrosion in a flexible raceway for the introduction of electrical conductors. This material is made from one continuous length of hot-dipped galvanized steel strip, and is exceptionally flexible in short radius bends.

Electrical Trade Sizes in Inches	Approx. Feet Per Std. Coil	Weight Lbs. Per 1,000 Ft.	Nominal Inside Diameter, Inches
⅜	350	160	⅜
⅜	250	255	⅜
½	100	520	⅝
¾	50	620	¹³⁄₁₆
1	50	1180	1
1¼	50	1480	1¼
1½	25	1800	1½
2	25	2280	2
2½	25	2840	2½
3	25	3130	3

Conforms To Federal Specification WWC 566

Underwriters' Laboratories Approved

GALVANIZED AND BLACK ENAMELED CONDUIT, COUPLINGS AND ELBOWS

WEIGHTS AND DIMENSIONS ARE NOMINAL

Size	Weight Per Foot in Lbs.	CONDUIT DIAMETERS External	CONDUIT DIAMETERS Internal	Thickness	Threads Per Inch	COUPLINGS Weight Per 100 in lbs.	90 DEGREE ELBOWS Weight Per 100 in Lbs.	90 DEGREE ELBOWS Radius Inches	90 DEGREE ELBOWS Offset Inches
¼	.425	.540	364	.088	18	6.0	41	3.850	6.375
⅜	.568	.675	.493	.091	18	9.5	55	3.917	6.437
½	.852	.840	.622	.109	14	11.6	82	4.000	6.500
¾	1.134	1.050	.824	.113	14	20.9	109	4.500	7.250
1	1.684	1.315	1.049	.133	11½	34.3	201	5.750	8.625
1¼	2.281	1.660	1.380	.140	11½	53.5	313	7.250	10.000
1½	2.731	1.900	1.610	.145	11½	74.3	441	8.250	11.000
2	3.678	2.375	2.067	.154	11½	120.8	707	9.500	13.625
2½	5.819	2.875	2.469	.203	8	172.0	1411	10.500	15.687
3	7.616	3.500	3.068	.216	8	249.8	1850	13.000	17.750
3½	9.202	4.000	3.548	.226	8	424.1	2979	15.000	20.000
4	10.889	4.500	4.026	.237	8	474.1	3528	16.000	21.312
4½	12.642	5.000	4.506	.247	8	550.0	4310	18.000	23.500
5	14.810	5.563	5.047	.258	8	700.0	6575	24.000	29.000
6	19.185	6.625	6.065	.280	8	750.0	9645	30.000	36.500

Conduit furnished in 10 foot lengths, threaded both ends with one coupling. Conduit pipe is known and spoken of by its nominal inside diameter.

Prices quoted on Special Size Bends and Lengths on application. All weights are subject to the usual variation of 5 per cent. Above products conform to Federal Specifications.

APPLETON ELECTRIC COMPANY

RECTANGULAR THREADED UNILET BODIES



TYPE A

Cadmium finish. Take rectangular covers and receptacles.

Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each	Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
					9120	2½	5	41	*
9000	½	100	53	*	9140	3	5	48	*
9020	¾	50	36	*	9160	3½	5	85	*
9040	1	20	23	*	9180	4	5	98	*
9060	1¼	20	42	*	90220	5	1	28	*
9080	1½	10	24	*	90240	6	1	38	*
9100	2	5	22	*	.....	...	.	..	.....



TYPE B

Cadmium finish. Take rectangular covers and receptacles.

Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each	Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
					9106	2	5	18	*
9006	½	100	52	*	9126	2½	5	42	*
9026	¾	50	36	*	9146	3	5	47	*
9046	1	20	23	*	9166	3½	5	115	*
9066	1¼	20	41	*	9186	4	5	103	*
9086	1½	10	23	*					



TYPE BE

Type BE Unilet Bodies for 4½ and 5-inch conduit have cover openings for 4-inch covers. Unilet bodies for 6-inch conduit, take special covers; specify number of wire holes required.

Cadmium finish.

Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each	Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
3101	1¼	20	80	*	3201	3½	5	180	*
3121	1½	10	53	*	3221	4	5	180	*
3141	2	5	41	*	3261	5	1	40	*
3161	2½	5	85	*	3281	6	1	75	*
3181	3	5	88	*	....	...	.	...	.....



TYPE C

Cadium finish.

Take rectangular covers and receptacles.

Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each	Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
					9102	2	5	24	*
9002	½	100	56	*	9122	2½	5	47	*
9022	¾	50	38	*	9142	3	5	57	*
9042	1	20	26	*	9162	3½	5	90	*
9062	1¼	20	44	*	9182	4	5	115	*
9082	1½	10	26	*	....	...	.	...	.....



TYPE E

Cadmium finish.

Take rectangular covers and receptacles.

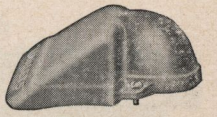
Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each	Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
					9101	2	5	22	*
9001	½	100	49	*	9121	2½	5	40	*
9021	¾	50	37	*	9141	3	5	47	*
9041	1	20	24	*	9161	3½	5	85	*
9061	1¼	20	41	*	9181	4	5	95	*
9081	1½	10	24	*	....	...	..	..	.....

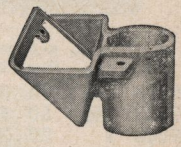
*See Price List

RECTANGULAR THREADED UNILET BODIES

TYPE F

Cadmium finish. Take rectangular covers and receptacles. Entrance fittings larger than 1 inch are listed on another page.





Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
10	½	50	74	*
20	¾	50	81	*
30	1	20	57	*

TYPE LRL

Type LRL Unilet body has double opening with blank cover on one side. Can be used either as Type LL or LR by changing cover.



Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each	Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
3205R	½	100	66	*	3305R	2	5	26	*
3225R	¾	50	45	*	3325R	2½	5	45	*
3245R	1	20	29	*	3345R	3	5	54	*
3265R	1¼	20	45	*	3365R	3½	5	125	*
3285R	1½	10	26	*	3385R	4	5	115	*

TYPE LB

Cadmium finish.

Take rectangular covers and receptacles.

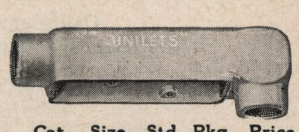


Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each	Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
9008	½	100	58	*	9108	2	5	25	*
9028	¾	50	39	*	9128	2½	5	46	*
9048	1	20	27	*	9148	3	5	55	*
9068	1¼	20	46	*	9168	3½	5	100	*
9088	1½	10	25	*	9188	4	5	110	*

TYPE LF

Cadmium finish.

Take rectangular covers and receptacles.



Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each	Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
9200	½	100	86	*	9300	2	5	32	*
9220	¾	50	63	*	9320	2½	5	55	*
9240	1	20	39	*	9340	3	5	63	*
9260	1¼	20	66	*	9360	3½	5	109	*
9280	1½	10	41	*	9380	4	5	120	*



TYPE LL

Cadmium finish.

Take rectangular covers and receptacles.

Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each	Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
9005-L	½	100	56	*	9105-L	2	5	22	*
9025-L	¾	50	42	*	9125-L	2½	5	45	*
9045-L	1	20	25	*	9145-L	3	5	54	*
9065-L	1¼	20	44	*	9165-L	3½	5	125	*
9085-L	1½	10	26	*	9185-L	4	5	115	*



TYPE LR

Cadmium finish.

Take rectangular covers and receptacles.

Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each	Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
9005-R	½	100	56	*	9105-R	2	5	22	*
9025-R	¾	50	42	*	9125-R	2½	5	45	*
9045-R	1	20	25	*	9145-R	3	5	54	*
9065-R	1¼	20	44	*	9165-R	3½	5	125	*
9085-R	1½	10	26	*	9185-R	4	5	115	*

*See Price List

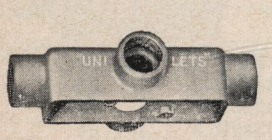
APPLETON ELECTRIC COMPANY

RECTANGULAR THREADED UNILET BODIES



TYPE T
(Regular)
Cadmium finish.
Take rectangular covers and receptacles.

Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each	No. Cat.	In. Size	Pkg. Std.	Wt. Pkg.	Each Price
9003	½	100	61	*	9103	2	5	27	*
9023	¾	50	44	*	9123	2½	5	50	*
9043	1	20	28	*	9143	3	5	63	*
9063	1¼	20	49	*	9163	3½	5	103	*
9083	1½	10	27	*	9183	4	5	123	*



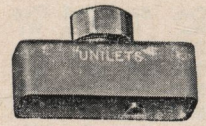
TYPE X
(Regular)
Cadmium finish.
Take rectangular covers and receptacles.

Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each	Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
9004	½	75	52	*	9104	2	5	31	*
9024	¾	50	48	*	9124	2½	5	63	*
9044	1	20	30	*	9144	3	5	68	*
9064	1¼	20	54	*	9164	3½	5	123	*
9084	1½	10	31	*	9184	4	5	133	*

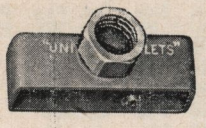
RECTANGULAR NO-THREAD UNILET BODIES

Cadmium Finish
Take Rectangular Covers and Receptacles

TYPES A AND B NO-THREAD UNILETS



Type A



Type B

Type A

Cat. No.	For Rigid Conduit (Heavy-Wall) Wt. Lbs. Std. Pkg.	Price Each	Size	Std. Pkg.	For Threadless Thin-Wall Conduit Cat. No.	Wt. Lbs. Std. Pkg.	Price Each
90N00	57	*	½	100	90T00	57	*
90N20	40	*	¾	50	90T20	40	*
90N40	27	*	1	20	90T40	27	*
90N60	46	*	1¼	20	90T60	46	*
90N80	27	*	1½	10	90T80	27	*
91N00	25	*	2	5	91T00	25	*

Type B

90N06	55	*	½	100	90T06	55	*
90N26	38	*	¾	50	90T26	38	*
90N46	26	*	1	20	90T46	26	*
90N66	43	*	1¼	20	90T66	43	*
90N86	26	*	1½	10	90T86	26	*
91N06	25	*	2	5	91T06	25	*

*See Price List

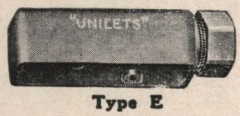
RECTANGULAR NO-THREAD BODIES

Cadmium Finish
Take Rectangular Covers and Receptacles

TYPES C AND E NO-THREAD UNILETS



Type C



Type E

Type C

Cat. No.	For Rigid Conduit (Heavy-Wall) Wt. Lbs. Std. Pkg.	Price Each	Size	Std. Pkg.	For Threadless Thin-Wall Conduit Cat. No.	Wt. Lbs. Std. Pkg.	Price Each
90N02	60	*	½	100	90T02	60	*
90N22	43	*	¾	50	90T22	43	*
90N42	31	*	1	20	90T42	31	*
90N62	53	*	1¼	20	90T62	53	*
90N82	32	*	1½	10	90T82	32	*
91N02	29	*	2	5	91T02	29	*

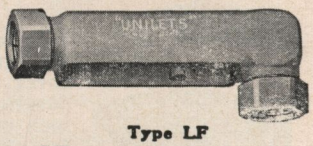
Type E

90N01	57	*	½	100	90T01	57	*
90N21	36	*	¾	50	90T21	36	*
90N41	26	*	1	20	90T41	26	*
90N61	46	*	1¼	20	90T61	45	*
90N81	26	*	1½	10	90T81	26	*
91N01	25	*	2	5	91T01	25	*

TYPES LB AND LF NO-THREAD UNILETS



Type LB



Type LF

Type LB

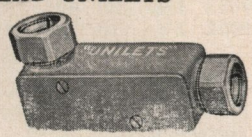
Cat. No.	For Rigid Conduit (Heavy-Wall) Wt. Lbs. Std. Pkg.	Price Each	Size	Std. Pkg.	For Threadless Thin-Wall Conduit Cat. No.	Wt. Lbs. Std. Pkg.	Price Each
90N08	62	*	½	100	90T08	62	*
90N28	47	*	¾	50	90T28	47	*
90N48	33	*	1	20	90T48	33	*
90N68	55	*	1¼	20	90T68	55	*
90N88	32	*	1½	10	90T88	32	*
91N08	30	*	2	5	91T08	30	*

Type LF

92N00	92	*	½	100	92T00	92	*
92N20	64	*	¾	50	92T20	64	*
92N40	46	*	1	20	92T40	46	*
92N60	74	*	1¼	20	92T60	74	*
92N80	45	*	1½	10	92T80	45	*
93N00	44	*	2	5	93T00	44	*

TYPE LRL NO-THREAD UNILETS

Type LRL Unilet body has double opening with blank cover on one side and can be used either as Type LL or LR.



Cat. No.	For Rigid Conduit (Heavy-Wall) Wt. Lbs Std. Pkg.	Price Each	Size	Std. Pkg.	For Threadless Thin-Wall Conduit Cat. No.	Wt. Lbs. Std. Pkg.	Price Each
32N05R	70	*	½	100	32T05R	70	*
32N25R	48	*	¾	50	32T25R	48	*
32N45R	33	*	1	20	32T45R	33	*
32N65R	50	*	1¼	20	32T65R	50	*
32N85R	31	*	1½	10	32T85R	31	*
33N05R	27	*	2	5	33T05R	27	*

*See Price List

APPLETON ELECTRIC COMPANY

RECTANGULAR NO-THREAD UNILET BODIES

Cadmium Finish

Take Rectangular Covers and Receptacles

TYPE LL NO-THREAD UNILETS

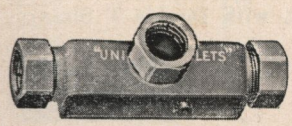


—For Rigid Conduit— (Heavy-Wall) Cat. No.	Wt. Lbs. Std. Pkg.	Price Each	Size	Std. Pkg.	—For Threadless— Thin-Wall Conduit Cat. No.	Wt. Lbs. Std. Pkg.	Price Each
90N05L	64	*	½	100	90T05L	64	*
90N25L	47	*	¾	50	90T25L	47	*
90N45L	33	*	1	20	90T45L	33	*
90N65L	54	*	1¼	20	90T65L	54	*
90N85L	32	*	1½	10	90T85L	32	*
91N05L	30	*	2	5	91T05L	30	*

TYPE LR NO-THREAD UNILETS



—For Rigid Conduit— (Heavy-Wall) Cat. No.	Wt. Lbs. Std. Pkg.	Price Each	Size	Std. Pkg.	—For Threadless— Thin-Wall Conduit Cat. No.	Wt. Lbs. Std. Pkg.	Price Each
.....	..						
90N05R	64	*	½	100	90T05R	64	*
90N25R	47	*	¾	50	90T25R	47	*
90N45R	33	*	1	20	90T45R	33	*
90N65R	54	*	1¼	20	90T65R	54	*
90N85R	32	*	1½	10	90T85R	32	*
91N05R	30	*	2	5	91T05R	30	*



TYPE T NO-THREAD UNILETS (Regular)

—For Rigid Conduit— (Heavy-Wall) Cat. No.	Wt. Lbs. Std. Pkg.	Price Each	Size	Std. Pkg.	—For Threadless— Thin-Wall Conduit Cat. No.	Wt. Lbs. Std. Pkg.	Price Each
.....	..	..					
90N03	73	*	½	100	90T03	73	*
90N23	53	*	¾	50	90T23	53	*
90N43	39	*	1	20	90T43	39	*
90N63	60	*	1¼	20	90T63	60	*
90N83	39	*	1½	10	90T83	39	*
91N03	34	*	2	5	91T03	34	*



TYPE TB NO-THREAD UNILETS

—For Rigid Conduit— (Heavy-Wall) Cat. No.	Wt. Lbs. Std. Pkg.	Price Each	Size	Std. Pkg.	—For Threadless— Thin-Wall Conduit Cat. No.	Wt. Lbs. Std. Pkg.	Price Each
96N00	39	*	½	50	96T00	39	*
96N20	29	*	¾	25	96T20	29	*
96N40	29	*	1	15	96T40	29	*
96N60	31	*	1¼	10	96T60	31	*
96N80	39	*	1½	10	96T80	39	*
97N00	34	*	2	5	97T00	34	*

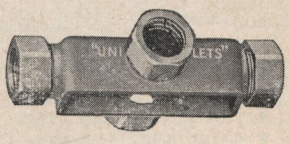
*See Price List

RECTANGULAR NO-THREAD UNILET BODIES

Cadmium Finish

Take Rectangular Covers and Receptacles

TYPE X NO-THREAD UNILETS (Regular)



—For Rigid Conduit— (Heavy-Wall) Cat. No.	Wt. Lbs. Std. Pkg.	Price Each	Size	Std. Pkg.	—For Threadless— Thin-Wall Conduit Cat. No.	Wt. Lbs. Std. Pkg.	Price Each
.....	..	..					
90N04	68	*	½	75	90T04	68	*
90N24	65	*	¾	50	90T24	65	*
90N44	45	*	1	20	90T44	45	*
90N64	67	*	1¼	20	90T64	67	*
90N84	42	*	1½	10	90T84	42	*
91N04	42	*	2	5	91T04	42	*

RECTANGULAR UNILET COVERS

FOR THREADED AND NO-THREAD UNILET BODIES

Porcelain, composition and metal rectangular covers of the same size may be assorted to make a standard package, regardless of style of cover.

4-WIRE COMPOSITION COVERS



For Unilet bodies with rectangular openings. Furnished with fastening screws.

Cat. No.	Size Cover, In.	Diam. Hole, In.	Std. Pkg. Assorted	Wt. Lb. Std. Pkg.	Price Each
604	½	5/16	200	20	*
624	¾	5/16	100	13	*
644	1	13/32	50	12½	*
664	1¼ or 1½	19/32	20	6	*
704	2	1	5	4	*
724	2½ or 3	1 7/16	5	8	*
764	3½ or 4	1 15/16	5	20	*
804	5	1⅞	1	30	*
824	6	1⅞	1	30	*

BLANK COMPOSITION COVERS



For Unilet bodies with rectangular openings. Furnished with fastening screws.

Cat. No.	Size Cover, In.	Std. Pkg. Assorted	Wt. Lb. Std. Pkg.	Price Each
600	½	200	20	*
620	¾	100	13	*
640	1	50	12½	*
660	1¼ or 1½	20	6	*
700	2	5	4	*
720	2½ or 3	5	8	*
760	3½ or 4	5	20	*
800	5	1	30	*
820	6	1	30	*

*See Price List

APPLETON ELECTRIC COMPANY

RECTANGULAR UNILET COVERS
FOR THREADED AND NO-THREAD UNILET BODIES
BLANK METAL COVERS
Flat

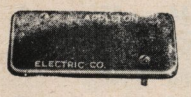


For Unilet bodies with rectangular openings. Furnished with fastening screws. Cadmium finish.

Blank Steel Cat. No.	Wt. Lbs. Std. Pkg.	Price Each	Size Inches	Std. Pkg. Ass't	Blank Malleable Cat. No.	Wt. Lbs. Std. Pkg.	Price Each
6000	20	*	½	200	6000-C	50	*
6020	15	*	¾	100	6020-C	40	*
6100	11	*	1	50	6100-C	30	*
6130	6	*	1¼–1½	20	6130-C	18	*
6200	3	*	2*	10	6200-C	10	*
6300	2½	*	2	5	6300-C	10	*
6320	5½	*	2½ or 3	5	6320-C	15	*
6360	13	*	3½ or 4	5	6360-C	20	*

*For use with rectangular Unilet for thin-wall conduit.

BLANK STEEL FLANGED COVERS

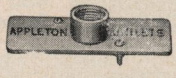


These covers are designed for use with rectangular threaded malleable Unilet bodies only. Cadmium finish.

Cat. No.	Size Cover, In.	Std. Pkg. Assorted	Wt. Lb. Std. Pkg.	Price Each
6000-F	½	200	32	*
6020-F	¾	100	16	*
6100-F	1	50	12	*
6130-F	1¼ or 1½	20	16	*
6300-F	2	5	7	*
6320-F	2½ or 3	5	5	*
6360-F	3½ or 4	5	10	*

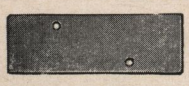
RECTANGULAR UNILET COVERS
FOR UNILET BODIES WITH RECTANGULAR OPENINGS
Furnished with Fastening Screws
SHEET STEEL WITH BRASS NIPPLE





Cat. No.	Size Male	Size Cover	Cat. No.	Size Female	Size Cover	Std. Pkg.
6007	⅜	½	6008	⅜	½	200
6029	⅜	¾	6030	⅜	¾	100
6042	½	½	6043	½	½	200
6082	½	¾	6083	½	¾	100

GASKETS
FOR USE WITH THREADED AND NO-THREAD RECTANGULAR UNILETS



SOLID GASKETS
For use between Unilets and Metal Covers.

Cat. No.	Size In.	Std. Pkg.	Price Each	Cat. No.	Size In.	Std. Pkg.	Price Each
				2563	1¼-1½	25	*
2560	½	200	*	2565	2	25	*
2561	¾	100	*	2566	2½-3	25	*
2562	1	50	*	2568	3½-4	25	*



OPEN GASKETS
For use between Unilets and Porcelain Covers.

Cat. No.	Size In.	Std. Pkg.	Price Each	Cat. No.	Size In.	Std. Pkg.	Price Each
2580	½	200	*	2585	2	25	*
2581	¾	100	*	2586	2½-3	25	*
2582	1	50	*	2588	3½-4	25	*
2583	1¼-1½	25	*	....	....	..	...

*See Price List

RECTANGULAR RECEPTACLES
FOR UNILET BODIES WITH RECTANGULAR OPENINGS
Furnished with Fastening Screws

LAMP RECEPTACLES — TWO-PIECE
660-Watt, 600-Volt



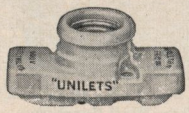
Porcelain top, composition base.

*With Shade Holder Groove

Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
7660	½	100	47	*
7661	¾	100	56	*

LAMP RECEPTACLES — ONE-PIECE
660-Watt, 600-Volt

Porcelain.



Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std.Pkg.	Price Each
*With Shade Holder Groove				
7640	½	100	51	*

If specified on order, lamp receptacle with lamp grip will be furnished at a slight advance in the list price.

*Shade Holder Groove on all rectangular receptacles is 1½ inches diameter.

2-POLE ATTACHMENT PLUG RECEPTACLES
15-Amp., 125-Volt or 10-Amp., 250 Volt
Composition — Duplex, with Double T Slots

Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
7685	½	100	14	*
7686	¾	100	10	*



2-POLE ATTACHMENT PLUG RECEPTACLES
15-Amp., 125-Volt or 10-Amp., 250-Volt
Composition — Single — with Double T Slots

Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
7665	½	100	14	*
7666	¾	100	15	*



2-WIRE, 3-POLE ATTACHMENT PLUG RECEPTACLES
15-Amp., 125-Volt or 10-Amp., 250-Volt

Porcelain. Extra pole grounded‡.

Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
7675	½	100	48	*
7676	¾	100	53	*
7677	1	50	34	*



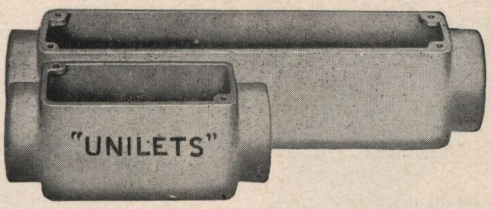
‡These receptacles are designed to take Hubbell No. 6149 cap. The neutral contact-blade of the 3-wire cap is made slightly longer than the others, and makes contact first when the plug is inserted and holds contact until after the others are disconnected. The polarity arrangement insures proper electrical connection at all times.

*See Price List

APPLETON ELECTRIC COMPANY

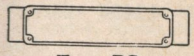
THREADED MOGUL UNILET BODIES

TAKE MOGUL COVERS

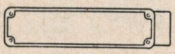


Type "C" 2-inch Rectangular Threaded Unilet with Type "BC" 2-inch Mogul Threaded Unilet to show comparative size

TYPES BC AND BEE



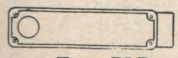
Type BC



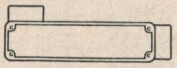
Type BEE

Cat. No.	Price Each	Size Inches	Std. Pkg.	Cat. No.	Price Each
12102	*	1	25	12101	*
12112	*	1¼	10	12111	*
12122	*	1½	10	12121	*
12132	*	2	5	12131	*
12142	*	2½	5	12141	*
12152	*	3	5	12151	*
12162	*	3½	5	12161	*
12172	*	4	5	12171	*

TYPES BLB AND BLL



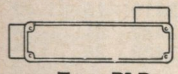
Type BLB



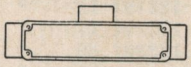
Type BLL

Cat. No.	Price Each	Size Inches	Std. Pkg.	Cat. No.	Price Each
12108	*	1	25	12105-L	*
12118	*	1¼	10	12115-L	*
12128	*	1½	10	12125-L	*
12138	*	2	5	12135-L	*
12148	*	2½	5	12145-L	*
12158	*	3	5	12155-L	*
12168	*	3½	5	12165-L	*
12178	*	4	5	12175-L	*

TYPES BLR AND BT

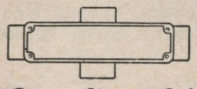


Type BLR



Type BT

Cat. No.	Price Each	Size Inches	Std. Pkg.	Cat. No.	Price Each
12105-R	*	1	25	12103	*
12115-R	*	1¼	10	12113	*
12125-R	*	1½	10	12123	*
12135-R	*	2	5	12133	*
12145-R	*	2½	5	12143	*
12155-R	*	3	5	12153	*
12165-R	*	3½	5	12163	*
12175-R	*	4	5	12173	*



TYPE BX

Cat. No.	Size In.	Std. Pkg.	Price Each	Cat. No.	Size In.	Std. Pkg.	Price Each
12104	1	25	*	12144	2½	5	*
12114	1¼	10	*	12154	3	5	*
12124	1½	10	*	12164	3½	5	*
12134	2	5	*	12174	4	5	*

Cadmium finish is the standard finish.

*See Price List

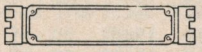
NO-THREAD MOGUL UNILET BODIES

TAKE MOGUL COVERS

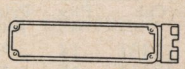


Type "C" 2-inch Rectangular No-Thread Unilet with Type 'BC" 2-inch Mogul No-Thread Unilet to show comparative size

TYPES BC AND BEE



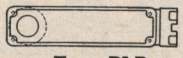
Type BC



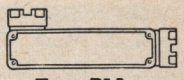
Type BEE

Cat. No.	Price Each	Size Inches	Std. Pkg.	Cat. No.	Price Each
12202	*	1	25	12201	*
12212	*	1¼	10	12211	*
12222	*	1½	10	12221	*
12232	*	2	5	12231	*

TYPES BLB AND BLL



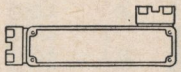
Type BLB



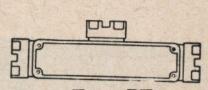
Type BLL

Cat. No.	Price Each	Size Inches	Std. Pkg.	Cat. No.	Price Each
12208	*	1	25	12205-L	*
12218	*	1¼	10	12215-L	*
12228	*	1½	10	12225-L	*
12238	*	2	5	12235-L	*

TYPES BLR AND BT

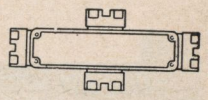


Type BLR



Type BT

Cat. No.	Price Each	Size Inches	Std. Pkg.	Cat. No.	Price Each
12205-R	*	1	25	12203	*
12215-R	*	1¼	10	12213	*
12225-R	*	1½	10	12223	*
12235-R	*	2	5	12233	*



TYPE BX

Cat. No.	Size In.	Std. Pkg.	Price Each	Cat. No.	Size In.	Std. Pkg.	Price Each
12204	1	25	*	12224	1½	10	*
12214	1¼	10	*	12234	2	5	*

Cadmium finish is the standard finish.

*See Price List

APPLETON ELECTRIC COMPANY

COVERS FOR MOGUL SERIES

THREADED AND NO-THREAD UNILET BODIES

Furnished with Fastening Screws

Covers for Mogul Unilet Bodies furnished either in bakelite or in malleable iron with bakelite bushings and also blank covers, as listed.



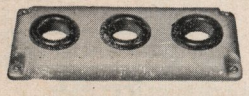
Malleable—Two-Wire

1-Wire

Malleable* Cat. No.	Pkg. Wt.	Price Each	Size In.	Diam. Holes	Std. Pkg.	Bakelite Cat. No.	Pkg. Wt.	Price Each
12301	14	*	1 -1¼	1	10	12401	20	*
12311	15	*	1½-2	1½	5	12411	10	*
12321	25	*	2½-3	2	5	12421	15	*
12331	40	*	3½-4	2	5	12431	25	*

2-Wire

12302	14	*	1 -1¼	¾	10	12402	20	*
12312	15	*	1½-2	1	5	12412	10	*
12322	25	*	2½-3	1½	5	12422	15	*
12332	40	*	3½-4	2	5	12432	25	*



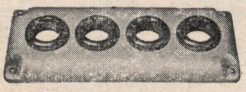
Malleable—Three-Wire



Bakelite—Three-Wire

3-Wire

Malleable* Cat. No.	Pkg. Wt.	Price Each	Size In.	Diam. Holes	Std. Pkg.	Bakelite Cat. No.	Pkg. Wt.	Price Each
12303	14	*	1 -1¼	¾	10	12403	20	*
12313	15	*	1½-2	1	5	12413	10	*
12323	25	*	2½-3	1½	5	12423	15	*
12333	40	*	3½-4	2	5	12433	25	*



Malleable—Four-Wire

Malleable* Cat. No.	Pkg. Wt.	Price Each	Size In.	Diam. Holes	Std. Pkg.	Bakelite Cat. No.	Pkg. Wt.	Price Each
12304	14	*	1 -1¼	¾	10	12404	20	*
12314	15	*	1½-2	1	5	12414	10	*
12324	25	*	2½-3	1¼	5	12424	15	*
12334	40	*	3½-4	1½	5	12434	25	*

5-Wire

Malleable* Cat. No.	Pkg. Wt.	Price Each	Size In.	Diam. Holes	Std. Pkg.	Bakelite Cat. No.	Pkg. Wt.	Price Each
12305	14	*	1 -1¼	19/32	10	12405	20	*
12315	15	*	1½-2	¾	5	12415	10	*
12325	25	*	2½-3	1	5	12425	15	*
12335	40	*	3½-4	1½	5	12435	25	*

*Cadmium finish is the standard finish.

*See Price List

COVERS FOR MOGUL SERIES

THREADED AND NO-THREAD UNILET BODIES

Furnished with Fastening Screws



Malleable—Six-Wire

6-Wire

Malleable* Cat. No.	Pkg. Wt.	Price Each	Size In.	Diam. Holes	Std. Pkg.	Bakelite Cat. No.	Pkg. Wt.	Price Each
12306	14	*	1 -1¼	19/32	10	12406	20	*
12316	15	*	1½-2	¾	5	12416	10	*
12326	25	*	2½-3	1	5	12426	15	*
12336	40	*	3½-4	1¼	5	12436	25	*

7-Wire

12307	14	*	1 -1¼	½	10	12407	20	*
12317	15	*	1½-2	¾	5	12417	10	*
12327	25	*	2½-3	1	5	12427	15	*
12337	40	*	3½-4	1¼	5	12437	25	*

8-Wire

12308	14	*	1 -1¼	7/16	10	12408	20	*
12318	15	*	1½-2	19/32	5	12418	10	*
12328	25	*	2½-3	¾	5	12428	15	*
12338	40	*	3½-4	1	5	12438	25	*

9-Wire

12309	14	*	1 -1¼	⅜	10	12409	20	*
12319	15	*	1½-2	19/32	5	12419	10	*
12329	25	*	2½-3	¾	5	12429	15	*
12339	40	*	3½-4	1	5	12439	25	*

BLANK COVERS



Blank Malleable*

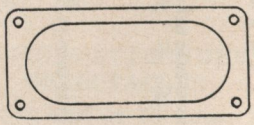


Blank Bakelite

Cat. No.	Pkg. Wt.	Price Each	Size Inches	Std. Pkg.	Cat. No.	Pkg. Wt.	Price Each
12300†	10	*	1 -1¼	10	12400	12	*
12310†	12	*	1½-2	5	12410	15	*
12320†	17	*	2½-3	5	12420	21	*
12330†	39	*	3½-4	5	12430	36	*

†Without gasket.

GASKETS



For use between Unilets and Covers, except Nos. 12350, 12360, 12370 and 12380 which have round gasket.

Cat. No.	Size Inches	Std. Pkg.	Price Each
12450	1 or 1¼	25	*
12460	1½ or 2	25	*
12470	2½ or 3	25	*
12480	3½ or 4	10	*

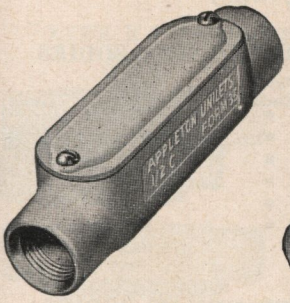
*Cadmium finish is the standard finish.

*See Price List

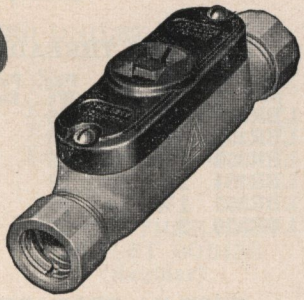
APPLETON ELECTRIC COMPANY

THE "35" LINE OF APPLETON UNILETS

THREADED AND NO-THREAD TYPES



Threaded type in all popular styles. Sizes: ½- to 4-inch.



No-Thread type in all popular styles. Sizes: ½- to 4-inch.

The skill and experience gained in a half century of building electrical fittings is represented in the "35" Line of Appleton Unilets. In every clean-cut detail they represent the finest type of workmanship. All castings are produced under the careful supervision that assures a properly finished product, free from all scars and blemishes.

The "35" Line in common with other lines of Unilets, has bodies of malleable iron, for both strength and lightness, and a cadmium finish to insure positive resistance to rust and corrosion. Here is a line that builds long-lasting quality into every installation.

The "35" Line does not supersede any of the other lines of Appleton Unilets, but is marketed in addition to the regular Rectangular ½- to 4-inch sizes Threaded and No-Thread Unilets for Rigid and Thin-Wall conduit.

The "35" Line does not have cover ear lugs in the wiring body, and it is with this expressed purpose in mind that Appleton Engineers designed the "35" Line for use where specifications require fittings without ear lugs.

Outstanding features of the "35" Line are as follows:

1—Unbreakable Malleable Castings with light walls and increased wiring space.

2—Smooth Castings free from holes, blemishes and gating marks.

3—No cover ear lugs in the Unilet body.

4—Wide flat cover surfaces, drilled and tapped at each end for cover screws.

5—Chamfered edges on all conduit hubs assuring straight and accurate tapping, without any sharp or rough edges.

6—Reinforced and slightly raised blank metal covers.

7—Perfectly flat and smooth porcelain and composition covers.

8—Moulded receptacles expressly designed for convenient and easy wiring.

FORM 35 THREADED UNILET BODIES

FOR USE WITH RIGID CONDUIT (Heavy-Wall)

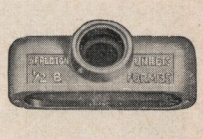
TYPE A THREADED UNILET BODIES

Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
A351	½	100	70	*
A352	¾	50	45	*
A353	1	20	30	*
A354	1¼	20	54	*
A355	1½	10	30	*
A356	2	5	32	*
A357	2½	5	45	*
A358	3	5	55	*
A359	3½	5	65	*
A360	4	5	80	*
A362	5	1	34	*
A363	6	1	57	*



TYPE B THREADED UNILET BODIES

Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
B351	½	100	70	*
B352	¾	50	45	*
B353	1	20	30	*
B354	1¼	20	54	*
B355	1½	10	30	*
B356	2	5	32	*
B357	2½	5	45	*
B358	3	5	55	*
B359	3½	5	75	*
B360	4	5	80	*



TYPE C THREADED UNILET BODIES

Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
C351	½	100	80	*
C352	¾	50	60	*
C353	1	20	36	*
C354	1¼	20	57	*
C355	1½	10	34	*
C356	2	5	33	*
C357	2½	5	50	*
C358	3	5	60	*
C359	3½	5	75	*
C360	4	5	95	*



TYPE E THREADED UNILET BODIES

Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
E351	½	100	70	*
E352	¾	50	45	*
E353	1	20	30	*
E354	1¼	20	54	*
E355	1½	10	30	*
E356	2	5	32	*
E357	2½	5	45	*
E358	3	5	55	*
E359	3½	5	65	*
E360	4	5	80	*



TYPE LB THREADED UNILET BODIES

Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
LB351	½	100	80	*
LB352	¾	50	60	*
LB353	1	20	36	*
LB354	1¼	20	57	*
LB355	1½	10	34	*
LB356	2	5	33	*
LB357	2½	5	50	*
LB358	3	5	60	*
LB359	3½	5	75	*
LB360	4	5	95	*
LB362	5	1	38	*
LB363	6	1	61	*



Cadmium finish is the standard finish.

*See Price List

APPLETON ELECTRIC COMPANY

FORM 35 THREADED UNILET BODIES
FOR USE WITH RIGID CONDUIT
(Heavy-Wall)



TYPE LF THREADED UNILET BODIES

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
LF351	½	100	100	*
LF352	¾	50	75	*
LF353	1	20	45	*
LF354	1¼	20	60	*
LF355	1½	10	40	*
LF356	2	5	36	*
LF357	2½	5	60	*
LF358	3	5	70	*
LF359	3½	5	85	*
LF360	4	5	105	*

TYPE LL THREADED UNILET BODIES



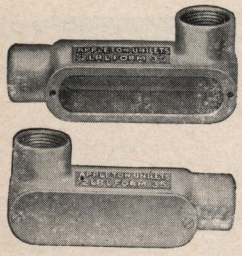
Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
LL351	½	100	80	*
LL352	¾	50	60	*
LL353	1	20	36	*
LL354	1¼	20	57	*
LL355	1½	10	51	*
LL356	2	5	33	*
LL357	2½	5	50	*
LL358	3	5	60	*
LL359	3½	5	75	*
LL360	4	5	95	*

TYPE LR THREADED UNILET BODIES



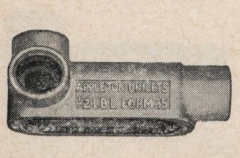
Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
LR351	½	100	80	*
LR352	¾	50	60	*
LR353	1	20	36	*
LR354	1¼	20	57	*
LR355	1½	10	51	*
LR356	2	5	33	*
LR357	2½	5	50	*
LR358	3	5	60	*
LR359	3½	5	75	*
LR360	4	5	95	*

TYPE LRL* THREADED UNILET BODIES



Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
LRL351	½	100	85	*
LRL352	¾	50	65	*
LRL353	1	20	40	*
LRL354	1¼	20	60	*
LRL355	1½	10	38	*
LRL356	2	5	35	*
LRL357	2½	5	55	*
LRL358	3	5	65	*
LRL359	3½	5	80	*
LRL360	4	5	100	*

TYPE LBL THREADED UNILET BODIES



Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
LBL351	½	50	50	*
LBL352	¾	25	35	*
LBL353	1	25	46	*
LBL354	1¼	10	28	*
LML355	1½	10	30	*
LBL356	2	5	27	*

*Type "LRL" Unilet body has double opening with blank cover on one side and can be used either as type "LL" or "LR", by changing the cover from one side to the other.

Cadmium finish is the standard finish.

*See Price List

FORM 35 THREADED UNILET BODIES
FOR USE WITH RIGID CONDUIT
(Heavy-Wall)

TYPE LBR THREADED UNILET BODIES



Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
LBR351	½	50	50	*
LBR352	¾	25	35	*
LBR353	1	25	46	*
LBR354	1¼	10	28	*
LBR355	1½	10	30	*
LBR356	2	5	27	*

TYPE TA THREADED UNILET BODIES



Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
TA351	½	50	55	*
TA352	¾	50	75	*
TA353	1	20	48	*
TA354	1¼	10	30	*
TA355	1½	10	34	*
TA356	2	5	32	*

TYPE TB THREADED UNILET BODIES



Cat. No.	Size a	Size b	Size c	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
TB351	½	½	½	100	95	*
TB352	¾	¾	¾	50	70	*
TB353	1	1	1	20	42	*
TB354	1¼	1¼	1¼	10	28	*
TB355	1½	1½	1½	10	30	*
TB356	2	2	2	5	27	*

TYPE TL THREADED UNILET BODIES



Cat. No.	Size a	Size b	Size c	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
TL351	½	½	½	100	95	*
TL352	¾	¾	¾	50	70	*
TL353	1	1	1	20	42	*
TL354	1¼	1¼	1¼	10	28	*
TL355	1½	1½	1½	10	30	*

TYPE TR THREADED UNILET BODIES



Cat. No.	Size a	Size b	Size c	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
TR351	½	½	½	100	95	*
TR352	¾	¾	¾	50	70	*
TD353	1	1	1	20	42	*
TR354	1¼	1¼	1¼	10	28	*
TR355	1½	1½	1½	10	30	*

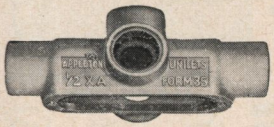
Cadmium finish is the standard finish.

*See Price List

APPLETON ELECTRIC COMPANY

FORM 35 THREADED UNILET BODIES
FOR USE WITH RIGID CONDUIT
(Heavy-Wall)

TYPE XA THREADED UNILET BODIES



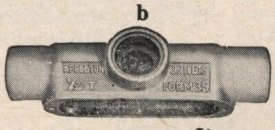
Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
XA351	½	50	65	*
XA352	¾	50	80	*
XA353	1	20	48	*

TYPE T THREADED UNILET BODIES
(Regular)



Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each	Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
T351	½	100	95	*	T356	2	5	34	*
T352	¾	50	70	*	T357	2½	5	60	*
T353	1	20	42	*	T358	3	5	70	*
T354	1¼	20	60	*	T359	3½	5	90	*
T355	1½	10	38	*	T360	4	5	110	*

TYPE T THREADED UNILET BODIES
(Special)



Cat. No.	Size a	Size b	Size c	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
T3521	½	¾	½	100	75	*
T3531	½	1	½	100	90	*
T3512	¾	½	¾	50	37	*
T3532	¾	1	¾	50	48	*
T3542	¾	1¼	¾	50	95	*
T3552	¾	1½	¾	50	115	*
T3513	1	½	1	20	42	*
T3523	1	¾	1	20	46	*
T3543	1	1¼	1	20	50	*
T3553	1	1½	1	20	65	*
T3563	1	2	1	20	75	*
T3514	1¼	½	1¼	20	55	*
T3524	1¼	¾	1¼	20	59	*
T3534	1¼	1	1¼	20	68	*
T3554	1¼	1½	1¼	20	78	*
T3564	1¼	2	1¼	20	120	*
T3515	1½	½	1½	10	32	*
T3525	1½	¾	1½	10	37	*
T3535	1½	1	1½	10	42	*
T3545	1½	1¼	1½	10	55	*
T3565	1½	2	1½	10	75	*
T3516	2	½	2	5	25	*
T3526	2	¾	2	5	31	*
T3536	2	1	2	5	37	*
T3546	2	1¼	2	5	42	*
T3556	2	1½	2	5	61	*
T3557	2½	1½	2½	5	52	*
T3567	2½	2	2½	5	58	*
T3568	3	2	3	5	60	*
T3578	3	2½	3	5	65	*
T3579	3½	2½	3½	5	90	*
T3589	3½	3	3½	5	95	*
T3580	4	3	4	5	110	*
T3590	4	3½	4	5	115	*

Cadmium finish is the standard finish

*See Price List

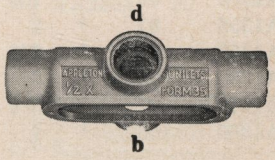
FORM 35 THREADED UNILET BODIES
FOR USE WITH RIGID CONDUIT
(Heavy-Wall)

TYPE X THREADED UNILET BODIES
(Regular)



Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each	Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
X351	½	75	85	*	X356	2	5	35	*
X352	¾	50	75	*	X357	2½	5	65	*
X353	1	20	48	*	X358	3	5	75	*
X354	1¼	20	63	*	X359	3½	5	105	*
X355	1½	10	44	*	X360	4	5	125	*

TYPE X THREADED UNILET BODIES
(Special)



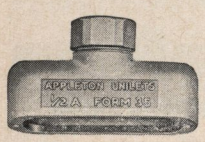
Cat. No.	Size a	Size b	Size c	Size d	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
X3512	¾	½	½	½	50	55	*
X3521	¾	½	¾	½	50	65	*
X3531	1	½	1	½	20	30	*
X3532	1	¾	1	¾	20	32	*
X35423	1¼	¾	1	¾	20	65	*
X35414	1¼	½	1¼	½	20	72	*
X35424	1¼	¾	1¼	¾	20	80	*
X3552	1½	¾	1½	¾	10	44	*

Cadmium finish is the standard finish

*See Price List

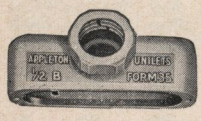
APPLETON ELECTRIC COMPANY

FORM 35 NO-THREAD UNILET BODIES
FOR USE WITH RIGID CONDUIT (Heavy-Wall) AND ELECTRICAL METALLIC TUBING



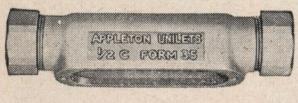
TYPE A NO-THREAD UNILET BODIES

For Rigid Conduit Heavy-Wall					For Electrical Metallic Tubing		
Cat. No.	Pkg. Wt.	Price Each	Size In.	Std. Pkg.	Cat. No.	Pkg. Wt.	Price Each
A1351	78	*	½	100	A2351	75	*
A1352	51	*	¾	50	A2352	48	*
A1353	34	*	1	20	A2353	30	*
A1354	65	*	1¼	20	A2354	62	*
A1355	35	*	1½	10	A2355	34	*
A1356	37	*	2	5	A2356	35	*
A1357	60	*	2½	5	.....	..	*
A1358	75	*	3	5	.....	..	*
A1359	85	*	3½	5	.....	..	*
A1360	100	*	4	5	.....	..	*



TYPE B NO-THREAD UNILET BODIES

For Rigid Conduit Heavy-Wall					For Electrical Metallic Tubing		
Cat. No.	Pkg. Wt.	Price Each	Size In.	Std. Pkg.	Cat. No.	Pkg. Wt.	Price Each
B1351	78	*	½	100	B2351	75	*
B1352	51	*	¾	50	B2352	48	*
B1353	34	*	1	20	B2353	30	*
B1354	65	*	1¼	20	B2354	62	*
B1355	35	*	1½	10	B2355	34	*
B1356	37	*	2	5	B2356	35	*
B1357	60	*	2½	5	.....	..	..
B1358	75	*	3	5	.....	..	..
B1359	85	*	3½	5	.....	..	..
B1360	100	*	4	5	.....	..	..



TYPE C NO-THREAD UNILET BODIES

For Rigid Conduit Heavy-Wall					For Electrical Metallic Tubing		
Cat. No.	Pkg. Wt.	Price Each	Size In.	Std. Pkg.	Cat. No.	Pkg. Wt.	Price Each
C1351	90	*	½	100	C2351	85	*
C1352	72	*	¾	50	C2352	65	*
C1353	40	*	1	20	C2353	34	*
C1354	68	*	1¼	20	C2354	69	*
C1355	44	*	1½	10	C2355	43	*
C1356	43	*	2	5	C2356	41	*
C1357	80	*	2½	5	.....	..	..
C1358	100	*	3	5	.....	..	..
C1359	120	*	3½	5	.....	..	..
C1360	140	*	4	5	.....	..	..

Cadmium finish is standard finish.

*See Price List

FORM 35 NO-THREAD UNILET BODIES
FOR USE WITH RIGID CONDUIT (Heavy-Wall) AND ELECTRICAL METALLIC TUBING



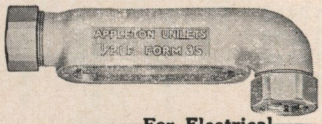
TYPE E NO-THREAD UNILET BODIES

For Rigid Conduit Heavy-Wall					For Electrical Metallic Tubing		
Cat. No.	Pkg. Wt.	Price Each	Size In.	Std. Pkg.	Cat. No.	Pkg. Wt.	Price Each
E1351	78	*	½	100	E2351	75	*
E1352	51	*	¾	50	E2352	48	*
E1353	34	*	1	20	E2353	30	*
E1354	65	*	1¼	20	E2354	62	*
E1355	35	*	1½	10	E2355	34	*
E1356	37	*	2	5	E2356	35	*
E1357	60	*	2½	5	.....	..	..
E1358	75	*	3	5	.....	..	..
E1359	85	*	3½	5	.....	..	..
E1360	100	*	4	5	.....	..	..



TYPE LB NO-THREAD UNILET BODIES

For Rigid Conduit Heavy-Wall					For Electrical Metallic Tubing		
Cat. No.	Pkg. Wt.	Price Each	Size In.	Std. Pkg.	Cat. No.	Pkg. Wt.	Price Each
LB1351	90	*	½	100	LB2351	85	*
LB1352	72	*	¾	50	LB2352	65	*
LB1353	40	*	1	20	LB2353	34	*
LB1354	68	*	1¼	20	LB2354	64	*
LB1355	44	*	1½	10	LB2355	43	*
LB1356	43	*	2	5	LB2356	41	*
LB1357	80	*	2½	5	.....	..	..
LB1358	100	*	3	5	.....	..	..
LB1359	120	*	3½	5	.....	..	..
LB1360	140	*	4	5	.....	..	..



TYPE LF NO-THREAD UNILET BODIES

For Rigid Conduit Heavy-Wall					For Electrical Metallic Tubing		
Cat. No.	Pkg. Wt.	Price Each	Size In.	Std. Pkg.	Cat. No.	Pkg. Wt.	Price Each
LF1351	110	*	½	100	LF2351	100	*
LF1352	81	*	¾	50	LF2352	75	*
LF1353	51	*	1	20	LF2353	45	*
LF1354	70	*	1¼	20	LF2354	68	*
LF1355	46	*	1½	10	LF2355	44	*
LF1356	47	*	2	5	LF2356	45	*



TYPE LL NO-THREAD UNILET BODIES

For Rigid Conduit Heavy-Wall					For Electrical Metallic Tubing		
Cat. No.	Pkg. Wt.	Price Each	Size In.	Std. Pkg.	Cat. No.	Pkg. Wt.	Price Each
LL1351	90	*	½	100	LL2351	85	*
LL1352	72	*	¾	50	LL2352	65	*
LL1353	40	*	1	20	LL2353	34	*
LL1354	68	*	1¼	20	LL2354	64	*
LL1355	44	*	1½	10	LL2355	43	*
LL1356	43	*	2	5	LL2356	41	*
LL1357	80	*	2½	5	.....	..	..
LL1358	100	*	3	5	.....	..	..
LL1359	120	*	3½	5	.....	..	..
LL1360	140	*	4	5	.....	..	..

Cadmium finish is the standard finish.

*See Price List

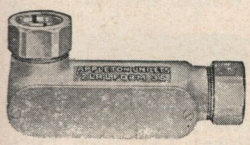
APPLETON ELECTRIC COMPANY

FORM 35 NO-THREAD UNILET BODIES
FOR USE WITH RIGID CONDUIT (Heavy-Wall) AND ELECTRICAL METALLIC TUBING



TYPE LR NO-THREAD UNILET BODIES

For Rigid Conduit—Heavy-Wall Cat. No.	Pkg. Wt.	Price Each	Size In.	Std. Pkg.	For Electrical—Metallic Tubing Cat. No.	Pkg. Wt.	Price Each
LR1351	90	*	½	100	LR2351	85	*
LR1352	72	*	¾	50	LR2352	65	*
LR1353	40	*	1	20	LR2353	34	*
LR1354	68	*	1¼	20	LR2354	64	*
LR1355	44	*	1½	10	LR2355	43	*
LR1356	43	*	2	5	LR2356	41	*
LR1357	80	*	2½	5	.....	..	..
LR1358	100	*	3	5	.....	..	..
LR1359	120	*	3½	5	.....	..	..
LR1360	140	*	4	5	.....	..	..



TYPE LRL NO-THREAD

Type "LRL" Unilet body has double opening with blank cover on one side and can be used either as type "LL" or "LR" by changing the cover from one side to the other.

For Rigid Conduit—Heavy-Wall Cat. No.	Pkg. Wt.	Price Each	Size In.	Std. Pkg.	For Electrical—Metallic Tubing Cat. No.	Pkg. Wt.	Price Each
LRL1351	95	*	½	100	LRL2351	88	*
LRL1352	81	*	¾	50	LRL2352	75	*
LRL1353	44	*	1	20	LRL2353	40	*
LRL1354	72	*	1¼	20	LRL2354	70	*
LRL1355	40	*	1½	10	LRL2355	39	*
LRL1356	42	*	2	5	LRL2356	41	*
LRL1357	85	*	2½	5	.....	..	..
LRL1358	105	*	3	5	.....	..	..
LRL1359	125	*	3½	5	.....	..	..
LRL1360	145	*	4	5	.....	..	..



TYPE LBL NO-THREAD UNILET BODIES

For Rigid Conduit—Heavy-Wall Cat. No.	Pkg. Wt.	Price Each	Size In.	Std. Pkg.	For Electrical—Metallic Tubing Cat. No.	Pkg. Wt.	Price Each
LBL1351	112	*	½	100	LBL2351	100	*
LBL1352	75	*	¾	50	LBL2352	65	*
LBL1353	52	*	1	20	LBL2353	48	*
LBL1354	34	*	1¼	10	LBL2354	32	*
LBL1355	38	*	1½	10	LBL2355	36	*
LBL1356	32	*	2	5	LBL2356	30	*



TYPE LBR NO-THREAD UNILET BODIES

For Rigid Conduit—Heavy-Wall Cat. No.	Pkg. Wt.	Price Each	Size In.	Std. Pkg.	For Electrical—Metallic Tubing Cat. No.	Pkg. Wt.	Price Each
LBR1351	112	*	½	100	LBR2351	100	*
LBR1352	75	*	¾	50	LBR2352	65	*
LBR1353	52	*	1	20	LBR2353	48	*
LBR1354	34	*	1¼	10	LBR2354	32	*
LBR1355	38	*	1½	10	LBR2355	36	*
LBR1356	32	*	2	5	LBR2356	30	*

Cadmium finish is the standard finish.

*See Price List

FORM 35 NO-THREAD UNILET BODIES
FOR USE WITH RIGID CONDUIT (Heavy-Wall) AND ELECTRICAL METALLIC TUBING

TYPE TA NO-THREAD UNILET BODIES



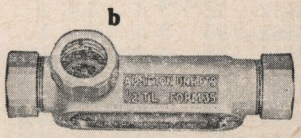
For Rigid Conduit—Heavy-Wall Cat. No.	Pkg. Wt.	Price Each	Size In.	Std. Pkg.	For Electrical—Metallic Tubing Cat. No.	Pkg. Wt.	Price Each
TA1351	38	*	½	30	TA2351	36	*
TA1352	44	*	¾	30	TA2352	41	*
TA1353	56	*	1	20	TA2353	54	*
TA1354	20	*	1¼	5	TA2354	18	*
TA1355	24	*	1½	5	TA2355	21	*
TA1356	32	*	2	5	TA2356	30	*

TYPE TB NO-THREAD UNILET BODIES



For Rigid Conduit—Heavy-Wall Cat. No.	Pkg. Wt.	Price Each	Size In.	Std. Pkg.	For Electrical—Metallic Tubing Cat. No.	Pkg. Wt.	Price Each
TB1351	56	*	½	50	TB2351	50	*
TB1352	44	*	¾	25	TB2352	40	*
TB1353	52	*	1	15	TB2353	45	*
TB1354	34	*	1¼	10	TB2354	32	*
TB1355	38	*	1½	10	TB2355	36	*
TB1356	32	*	2	5	TB2356	30	*

TYPE TL NO-THREAD UNILET BODIES



For Rigid Conduit—Heavy-Wall Cat. No.	Pkg. Wt.	Price Each	Size a	Size b	Size c	Std. Pkg.	For Electrical—Metallic Tubing Cat. No.	Pkg. Wt.	Price Each
TL1351	55	*	½	½	½	50	TL2351	50	*
TL1352	38	*	¾	¾	¾	25	TL2352	33	*
TL1353	52	*	1	1	1	20	TL2353	48	*
TL1354	34	*	1¼	1¼	1¼	10	TL2354	32	*
TL1355	38	*	1½	1½	1½	10	TL2355	36	*

TYPE TR NO-THREAD UNILET BODIES



For Rigid Conduit—Heavy-Wall Cat. No.	Pkg. Wt.	Price Each	Size a	Size b	Size c	Std. Pkg.	For Electrical—Metallic Tubing Cat. No.	Pkg. Wt.	Price Each
TR1351	50	*	½	½	½	50	TR2351	50	*
TR1352	38	*	¾	¾	¾	25	TR2352	33	*
TR1353	52	*	1	1	1	20	TR2353	48	*
TR1354	34	*	1¼	1¼	1¼	10	TR2354	32	*
TR1355	38	*	1½	1½	1½	10	TR2355	36	*

Cadmium finish is the standard finish.

*See Price List

APPLETON ELECTRIC COMPANY

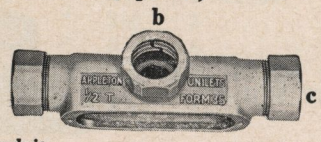
FORM 35 NO-THREAD UNILET BODIES
FOR USE WITH RIGID CONDUIT (Heavy-Wall) AND ELECTRICAL METALLIC TUBING



TYPE T NO-THREAD UNILET BODIES (Regular)

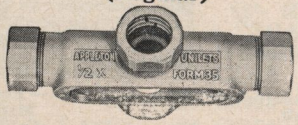
—For Rigid Conduit— Heavy-Wall Cat. No.	Pkg. Wt.	Price Each	Size In.	Std. Pkg.	—For Electrical— Metallic Tubing Cat. No.	Pkg. Wt.	Price Each
T1351	110	*	½	100	T2351	100	*
T1352	76	*	¾	50	T2352	65	*
T1353	52	*	1	20	T2353	48	*
T1354	70	*	1¼	20	T2354	68	*
T1355	49	*	1½	10	T2355	48	*
T1356	50	*	2	5	T2356	49	*
T1357	105	*	2½	5	.....	..	..
T1358	120	*	3	5	.....	..	..
T1359	150	*	3½	5	.....	..	..
T1360	165	*	4	5	.....	..	..

TYPE T NO-THREAD UNILET BODIES (Special)



—For Rigid Conduit— Heavy-Wall Cat. No.	Pkg. Wt.	Price Each	—Size— a	b	c	Std. Pkg.	—For Electrical— Metallic Tubing Cat. No.	Pkg. Wt.	Price Each
T13521	118	*	½	¾	½	100	T23521	112	*
T13531	126	*	½	1	½	100	T23531	122	*
T13512	45	*	¾	½	¾	50	T23512	43	*
T13532	53	*	¾	1	¾	50	T23532	51	*
T13542	98	*	¾	1¼	¾	50	T23542	95	*
T13552	120	*	¾	1½	¾	50	T23552	112	*
T13513	48	* 1		½	1	20	T23513	44	*
T13523	54	* 1		¾	1	20	T23523	50	*
T13543	58	* 1		1¼	1	20	T23543	54	*
T13553	72	* 1		1½	1	20	T23553	68	*
T13563	90	* 1		2	1	20	T23563	85	*
T13514	62	* 1¼		½	1¼	20	T23514	60	*
T13524	65	* 1¼		¾	1¼	20	T23524	62	*
T13534	78	* 1¼	1		1¼	20	T23534	72	*
T13554	45	* 1¼	1½		1¼	10	T23554	43	*
T13564	30	* 1¼	2		1¼	5	T23564	28	*
T13515	40	* 1½		½	1½	10	T23515	38	*
T13525	52	* 1½		¾	1½	10	T23525	52	*
T13535	56	* 1½	1		1½	10	T23535	53	*
T13545	63	* 1½	1¼		1½	10	T23545	60	*
T13565	35	* 1½	2		1½	5	T23565	33	*
T13516	30	* 2		½	2	5	T23516	28	*
T13526	35	* 2		¾	2	5	T23526	30	*
T13536	40	* 2	1		2	5	T23536	37	*
T13546	48	* 2	1¼		2	5	T23546	45	*
T13556	65	* 2	1½		2	5	T23556	62	*

TYPE X NO-THREAD UNILET BODIES (Regular)



—For Rigid Conduit— Heavy-Wall Cat. No.	Pkg. Wt.	Price Each	Size In.	Std. Pkg.	—For Electrical— Metallic Tubing Cat. No.	Pkg. Wt.	Price Each
X1351	95	*	½	75	X2351	90	*
X1352	94	*	¾	50	X2352	88	*
X1353	56	*	1	20	X2353	52	*
X1354	78	*	1¼	20	X2354	77	*
X1355	64	*	1½	15	X2355	63	*
X1356	55	*	2	5	X2356	53	*

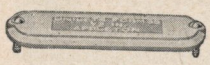
Cadmium finish is the standard finish.

***See Price List**

COVERS
FOR FORM 35 THREADED AND NO-THREAD UNILET BODIES
Furnished with Fastening Screws and Fibre Retaining Washers

BLANK COVERS





Size In.	Std. Pkg.	Unit Pkg.	—Blank Steel— Cat. No.	Price Each	—Blank Malleable— Cat. No.	Price Each
½	200	50	35000	*	35010	*
¾	100	50	35020	*	35030	*
1	50	25	35040	*	35050	*
1¼, 1½	20	20	35060	*	35070	*
2	5	5	35080	*	35090	*
2½, 3	5	5	36000	*	36010	*
3½, 4	5	5	36020	*	36030	*
5	1	1	36050	*	.....	..
6	1	1	36060	*	.....	..

Cadmium is the standard finish for metal covers.

COMPOSITION WITH WIRE HOLES



One-Wire Standard



Two-Wire

Size In.	Std. Pkg.	Unit Pkg.	—1-Wire Standard† Cat. No.	Diam. Hole	Price Each	—1-Wire Special— Cat. No.	Diam. Hole	Price Each
½	200	20	35201	13/32	*	35211	5/8	*
¾	100	20	35221	1/16	*	35231	25/32	*
1	50	20	35241	½	*	35251	1	*
1¼, 1½	20	10	35261	½	*	35271	1⅛	*
2	5	5	35281	1 25/32	*	.....	...	..
2½, 3	5	5	35401	2 5/16	*	.....	...	..
3½, 4	5	5	35421	3¼	*	.....	...	..



Three-Wire



Blank Cover

Size In.	Std. Pkg.	Unit Pkg.	—2-Wire Cat. No.	Diam. Hole	Price Each	—3-Wire— Cat. No.	Diam. Hole	Price Each
½	200	20	35202	3/8	*	35203	5/16	*
¾	100	20	35222	3/8	*	35223	3/8	*
1	50	20	35242	13/32	*	35243	13/32	*
1¼, 1½	20	10	35262	13/32	*	35263	13/32	*
2	5	5	35282	1	*	35283	1	*
2½, 3	5	5	35402	1 7/16	*	35403	1 7/16	*
3½, 4	5	5	35422	1 15/16	*	35423	1 15/16	*
5	1	1	36052	...	*	36053	...	*
6	1	1	36062	...	*	36063	...	*
			—4-Wire—			—5-Wire—		
½	200	20	35204	5/16	*	.....	...	*
¾	100	20	35224	5/16	*	35224	5/16	*
1	50	20	35244	13/32	*	35245	13/32	*
1¼, 1½	20	10	35264	13/32	*	35265	13/32	*
2	5	5	35284	1	*	35285	13/16	*
2½, 3	5	5	35404	1 7/16	*	35405	1 7/16	*
3½, 4	5	5	35424	1 15/16	*	35425	1½	*
5	1	1	36054	...	*	36055	...	*
6	1	1	36064	...	*	36065	...	*
			—6-Wire—			—7-Wire—		
¾	100	20	35226	5/16	*	.....	...	*
1	50	20	35246	3/8	*	35247	11/32	*
1¼, 1½	20	10	35266	½	*	35267	½	*
2	5	5	35286	‡	..	35287	‡	..
2½, 3	5	5	35406	7/8	*	35407	25/32	*
3½, 4	5	5	35426	1 1/16	*	35427	1	*

†Standard and special 1-wire covers differ only in the diameter of wire hole. Standard 1-wire covers will be furnished, unless special covers are specified on the order.

‡No. 35288 composition cover has 6-wire holes and two knockouts so that when one knockout is removed, same can be used as a 7-wire cover and when both knockouts are removed same can be used as an 8-wire cover.

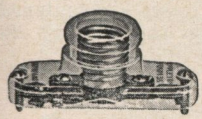
***See Price List**

APPLETON ELECTRIC COMPANY

RECEPTACLES
FOR FORM 35 THREADED AND NO-THREAD UNILET BODIES
Furnished with Fastening Screws

LAMP RECEPTACLES — TWO-PIECE

Porcelain top and composition base. 660-watt, 600-volt.



Size In.	Std. Pkg.	Cat. No.	*With Shade Holder Groove Pkg. Wt.	Price Each
½	100	35100	52	*
¾	100	35101	60	*
1	50	35102	46	*



PORCELAIN LAMP RECEPTACLES—ONE-PIECE

Porcelain.

660-watt, 600-volt.

Size In.	Std. Pkg.	Cat. No.	*With Shade Holder Groove Pkg. Wt.	Price Each
½	100	35110	60	*
¾	100	35111	65	*
1	50	35112	40	*





2-POLE ATTACHMENT PLUG RECEPTACLES†

Composition. With double T slots. 15-ampere, 125-volt or 10-ampere, 250-volt.

Size In.	Std. Pkg.	Single Cat. No.	Single Pkg. Wt.	Single Price Each	Duplex Cat. No.	Duplex Pkg. Wt.	Duplex Price Each
½	100	35120	45	*	35125	35	*
¾	100	35121	50	*	35126	38	*
1	50	35122	35	*	35127	30	*

2-POLE POLARITY PLUG RECEPTACLE



Composition. Receptacles take Hubbell No. 5567 Polarized Plug Cap.

Size In.	Std. Pkg.	15-Amp., 125-Volt 10-Amp.,.250-Volt; Cat. No.	Pkg. Wt.	Price Each	20-Amp., 250-Volt Cat. No.	Pkg. Wt.	Price Each
½	100	35130	48	*	35135	50	*
¾	100	35131	52	*	35136	53	*
1	50	35132	35	*	35137	40	*

3-POLE POLARITY PLUG RECEPTACLES‡



Composition. Rating: 15-ampere, 125-volt or 10-ampere, 250-volt.

Size In.	Std. Pkg.	Grounded Cat. No.	Grounded Pkg. Wt.	Grounded Price Each
¾	100	35151	55	*
1	50	35152	38	*

If specified on the order, lamp receptacle with lamp grip will be furnished at a slight advance in the list price.

† We do not furnish Plug Caps for these receptacles.

‡ Take Hubbell Plug Caps Cat. Nos. 7055, 9750.

* Shade holder grooves on all lamp receptacles 1⅛ inches diameter.

*See Price List

RECEPTACLES AND COVERS
FOR FORM 35 THREADED AND NO-THREAD UNILET BODIES
Furnished with Fastening Screws

CORD ROSETTES

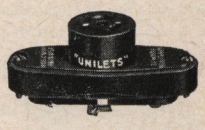
Composition, with cord grip. 660-watt, 250-volt.



Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
35140	½	100	52	*
35141	¾	100	57	*
35142	1	50	38	*

TWIST-LOCK RECEPTACLES‡
3-Wire—Polarized

Bakelite top, composition base. 15-amp., 125-volt; 10-amp., 250-volt.



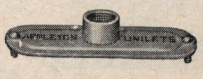
Size In.	Std. Pkg.	Not Grounded Cat. No.	Not Grounded Pkg. Wt.	Not Grounded Price Each	Grounded Cat. No.	Grounded Pkg. Wt.	Grounded Price Each
½	100	35170	55	*	35175	55	*

‡Take Hubbell Plug Caps Cat. Nos. 7567, 7568, 7554, 7558, 7572, 7573. If desired grounded, suffix letter "G" to Hubbell catalog number.

STEEL COVERS WITH BRASS NIPPLE



Male

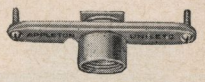


Female

Size Cover	Size Nipple	Std. Pkg.	Pkg. Wt.	Male Cat. No.	Male Price Each	Female Cat. No.	Female Price Each
½	⅜	200	38	35302	*	35307	*
¾	⅜	100	22	35312	*	35317	*
1	⅜	50	18	35322	*	35327	*
½	½	200	38	35303	*	35308	*
¾	½	100	22	35313	*	35318	*
1	½	50	18	35323	*	35328	*
1¼, 1½	½	20	10	35333	*	35338	*

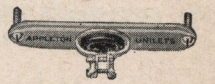
COVERS WITH CUSHION FIXTURE HANGER
For ½-Inch Conduit

These covers with cushion fixture hanger provide a self-aligning flexible cushion suspension for electric fixtures. Covers have hubs for ½-inch conduit.



Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
35850	½	200	61	*
35851	¾	100	37	*
35852	1	50	23	*

WITH CORD GRIP



Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
35860	½	200	43	*
35861	¾	100	24	*

Cadmium finish is the standard finish.

*See Price List

APPLETON ELECTRIC COMPANY

COVERS

FOR FORM 35 THREADED AND NO-THREAD UNILET BODIES

The Covers illustrated and listed below are made in two sizes for ½ and ¾-inch (except No. 35868 made in ½-inch size only) Form 35 Unilet Bodies and take P&S-Despard, Bryant "IL," Hubbell and Arrow "T" Interchangeable Line of Wiring Devices, except Cover with Guard which is designed for switches only.

Nos. 35865 and 35866 Covers are furnished with strap for mounting on device such as switch, receptacles, etc. No. 35868 Cover with Guard is furnished with strap for switch only.



Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
35865	½	50	4	*
35866	¾	25	3	*



With Guard
(For Switches Only)

35868	½	50	5	*

VAPORPROOF SWITCH COVERS

For Use with Form 35 Unilet Bodies

Take P&S-Despard, Bryant "IL" and Hubbell Interchangeable line of tumbler flush switches.

A steel bridge is furnished with each vaportight switch cover on which may be mounted the tumbler flush switch.



Cat. No.	Size	Std. Pkg.	Pkg. Wt.	Price Each
35820	¾	50	15	*
35840	1	20	18	*

Cadmium finish is the standard finish.

*See Price List

FORM 35 THREADED UNILET BODIES

TYPE LBD — FOR USE WITH RIGID CONDUIT

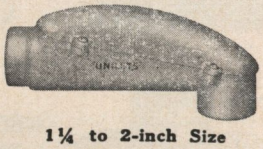
Furnished with Blank Malleable Dome Cover

The Type LBD Unilets listed below have been designed for use where a 90-degree bend in the conduit system is required.

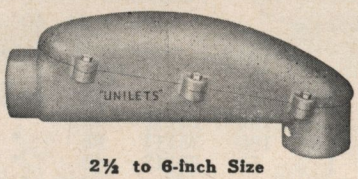
Cover opening is at an angle with the center line of the body and ample in size, making it possible for conductors to be pulled straight through either hub. Dome covers provide extra space inside for the bend in the enclosed conductors. Covers are fastened by machine screws threading into tapped lugs on the bodies.



½ to 1-inch Size

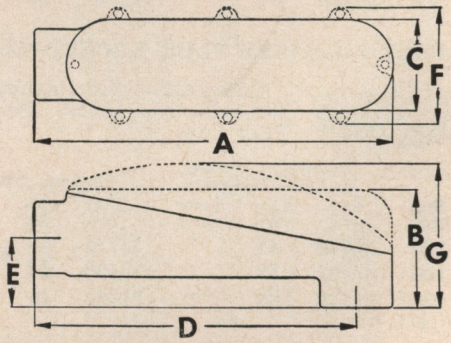


1¼ to 2-inch Size



2½ to 6-inch Size

Size In.	Type LBD Unilets Cat. No.	Std. Pkg.	Price Each	Gaskets Cat. No.	Std. Pkg.	Price Each
½	LBD-351	50	*	35550	100	*
¾	LBD-352	25	*	35551	100	*
1	LBD-353	25	*	35552	50	*
1¼	LBD-354	10	*	35553	50	*
1½	LBD-355	10	*	35554	25	*
2	LBD-356	5	*			
2½	LBD-357	5	*	35555	25	*
3	LBD-358	5	*			
3½	LBD-359	5	*	35556	10	*
4	LBD-360	5	*			
5	LBD-362	1	*	35557	10	*
6	LBD-363	1	*	35558	5	*



DIMENSIONS IN INCHES

Cat. No.	Size	A	B	C	D	E	F	G
LBD-351	½	5	2 5/16	1¼	4 3/16	1½	.	. . .
LBD-352	¾	6 1/16	2 7/16	1½	5½	1 7/16	. . .	. . . .
LBD-353	1	6 3/16	2⅛	1¾	5½	1 11/16	. . .	. . . .
LBD-354	1¼	8½	. . .	2½	7½	2⅛	3 1/16	4 7/16
LBD-355	1½	12⅛	. . .	3⅛	10 1/16	2 1/16	4⅛	4 7/16
LBD-356	2	12 7/16	. . .	3⅛	10 1/16	2¾	4⅛	5½
LBD-357	2½	16 1/16	. . .	4 1/16	15½	3¼	5½	6¾
LBD-358	3	17	. . .	4 1/16	14⅞	3 1/16	5½	7½
LBD-359	3½	21¾	. . .	5½	19 7/16	4½	6½	9¼
LBD-360	4	22	. . .	5½	19 1/16	4⅜	6½	9¾
LBD-362	5	32 7/16	. . .	6½	29 1/16	5⅛	8⅜	10½
LBD-363	6	41½	. . .	7⅝	37⅜	5⅜	9¾	15

Cadmium finish is the standard finish. Other finishes available.

*See Price List

APPLETON ELECTRIC COMPANY

THREADED UNILET BODIES

FS SERIES—SHALLOW
For Use with Rigid Conduit (Heavy-Wall)

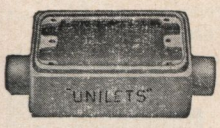
Take covers and shallow flush rectangular wiring devices, or plug receptacle housings. Furnished without screws for wiring devices.

Overall dimensions, exclusive of hubs: length, $4\frac{9}{16}$ inches; width, $2\frac{13}{16}$ inches; depth, 2 inches.



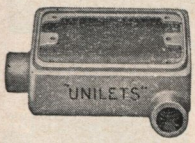
TYPE FS

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
7901	½	25	44	*
7921	¾	25	47	*
7941	1	15	26	*



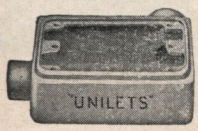
TYPE FSC

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
7902	½	25	47	*
7922	¾	25	51	*
7942	1	15	29	*



TYPE FSL

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
7905-L	½	25	46	*
7925-L	¾	25	51	*
7945-L	1	15	29	*



TYPE FSR

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
7905-R	½	25	46	*
7925-R	¾	25	51	*
7945-R	1	15	29	*



TYPE FSS

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
7910	½	25	47	*
7930	¾	25	51	*

1-Inch Not Made.



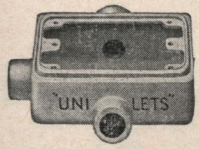
TYPE FSCC

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
7911	½	25	46	*
7931†	¾	25	49	*
7951†	1	15	32	*
7971‡	¾	25	53	*



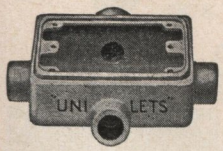
TYPE FSCT

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
7909	½	25	49	*
7929	¾	25	50	*
7949	1	15	33	*



TYPE FST

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
7903	½	25	48	*
7923	¾	25	50	*
7943	1	15	33	*



TYPE FSX

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
7904	½	25	49	*
7924	¾	25	52	*
7944	1	15	35	*

†Hubs at right are ½-inch. ‡All hubs, ¾-inch.
Cadmium Finish is the standard finish.
*See Price List

THREADED UNILET BODIES

FS SERIES — SHALLOW
For Use with Rigid Conduit (Heavy-Wall)

Take covers and shallow flush rectangular wiring devices, or plug receptacle housings. Furnished without screws for wiring devices.

Overall dimensions of body, exclusive of hubs: Length, $4\frac{9}{16}$ inches; width $2\frac{13}{16}$ inches; depth, 2 inches.

TYPE FSCD

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
7913	½	25	48	*
7933	¾	25	50	*



FD SERIES — DEEP
For Use with Rigid Conduit (Heavy-Wall)

Overall dimensions of body, exclusive of hubs: Length, $4\frac{9}{16}$ inches; width, $2\frac{13}{16}$ inches; depth, $2\frac{11}{16}$ inches.

TYPE FD

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
17901	½	25	54	*
17921	¾	25	57	*
17941	1	15	37	*



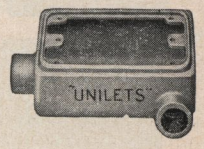
TYPE FDC

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
17902	½	25	56	*
17922	¾	25	60	*
17942	1	15	41	*



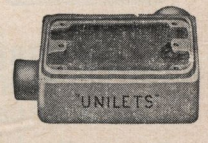
TYPE FDL

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
17905L	½	25	56	*
17925L	¾	25	60	*
17945L	1	15	41	*



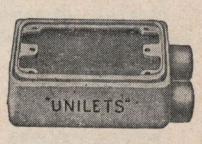
TYPE FDR

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
17905R	½	25	56	*
17925R	¾	25	60	*
17945R	1	15	41	*



TYPE FDD

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
17910	½	25	56	*
17930	¾	25	60	*



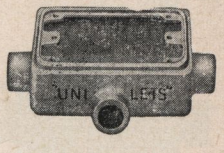
TYPE FDCC

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
17911	½	25	58	*
17931†	¾	25	63	*
17951†	1	15	44	*
17991‡	¾	25	67	*



TYPE FDCT

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
17909	½	25	58	*
17929	¾	25	63	*
17949	1	15	44	*



†The hubs at the right in the illustration are ½-inch.
‡All hubs are ¾-inch.
Cadmium Finish is the standard finish.
*See Price List

APPLETON ELECTRIC COMPANY

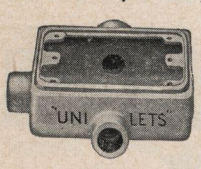
THREADED UNILET BODIES

FD SERIES — DEEP

For Use with Rigid Conduit (Heavy-Wall)

Take covers and deep or shallow flush rectangular wiring devices, or plug receptacle housings. Furnished without screws for wiring devices.

Overall dimensions, exclusive of hubs: Length, 4 1/8 inches; width, 2 1/8 inches; depth, 2 1/8 inches.



TYPE FDT

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
17903	½	25	58	*
17923	¾	25	63	*
17943	1	15	44	*

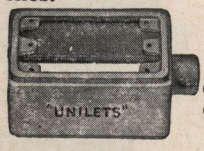


TYPE FDX

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
17904	½	25	61	*
17924	¾	25	66	*
17944	1	15	47	*

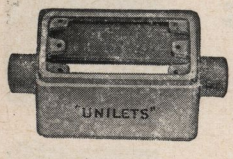
FS SERIES — DOUBLE OPENING

Overall dimensions of body, exclusive of hubs: Length, 4 1/8 inches; width, 2 1/8 inches; depth, 2 inches.



TYPE FS

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
7918	½	25	60	*
7938	¾	25	63	*



TYPE FSC

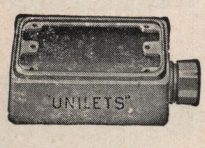
Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
7919	½	25	62	*
7939	¾	25	65	*

NO-THREAD UNILET BODIES

FS SERIES — SHALLOW

For Rigid Conduit and Thin-Wall Conduit

Overall dimensions of body, exclusive of hubs: Length, 4 1/8 inches; depth, 2 inches.



TYPE FS

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
For Rigid Conduit				
79N01	½	25	45	*
79N21	¾	25	47	*
79N41	1	15	29	*
For Thin-Wall Conduit				
79T01	½	25	45	*
79T21	¾	25	45	*
79T41	1	15	29	*

TYPE FSC



Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
For Rigid Conduit				
79N02	½	25	49	*
79N22	¾	25	52	*
79N42	1	15	34	*
For Thin-Wall Conduit				
79T02	½	25	49	*
79T22	¾	25	52	*
79T42	1	15	34	*

Cadmium Finish is the standard finish.

*See Price List

NO-THREAD UNILET BODIES

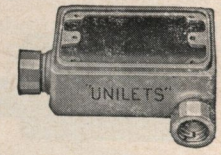
FS SERIES — SHALLOW

For Rigid Conduit and Thin-Wall Conduit

Overall dimensions of body, exclusive of hubs: length, 4 1/8"; width, 2 1/8"; depth, 2".

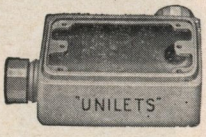
TYPE FSL

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
For Rigid Conduit				
79N05L	½	25	49	*
79N25L	¾	25	55	*
79N45L	1	15	34	*
For Thin-Wall Conduit				
79T05L	½	25	49	*
79T25L	¾	25	55	*
79T45L	1	15	34	*



TYPE FSR

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
For Rigid Conduit				
79N05R	½	25	49	*
79N25R	¾	25	55	*
79N45R	1	15	34	*
For Thin-Wall Conduit				
79T05R	½	25	49	*
79T25R	¾	25	55	*
79T45R	1	15	34	*



TYPE FSS

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
For Rigid Conduit				
79N10	½	25	46	*
79N30	¾	25	48	*
For Thin-Wall Conduit				
79T10	½	25	46	*
79T30	¾	25	48	*

Cadmium finish.



TYPE FSCC

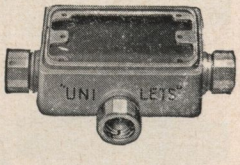
Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
For Rigid Conduit				
79N11	½	25	48	*
79N31	¾-½*	25	54	*
79N51	1-½*	15	42	*
For Thin-Wall Conduit				
79T11	½	25	48	*
79T31	¾-½*	25	54	*
79T51	1-½*	15	42	*

*The hubs at the right are ½-inch.



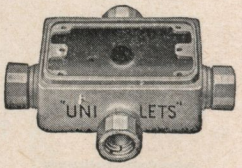
TYPE FSCT

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
For Rigid Conduit				
79N09	½	25	48	*
79N29	¾	25	54	*
79N49	1	15	44	*
For Thin-Wall Conduit				
79T09	½	25	48	*
79T29	¾	25	54	*
79T49	1	15	44	*



TYPE FSX

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
For Rigid Conduit				
79N04	½	25	50	*
79N24	¾	25	56	*
79N44	1	15	46	*
For Thin-Wall Conduit				
79T04	½	25	50	*
79T24	¾	25	56	*
79T44	1	15	46	*



TYPE FSCD

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
For Rigid Conduit				
79N13	½	25	50	*
79N33	¾	25	56	*
For Thin-Wall Conduit				
79T13	½	25	50	*
79T33	¾	25	56	*



*See Price List

APPLETON ELECTRIC COMPANY

UNILET SINGLE-GANG COVERS

FOR FS AND FD SERIES OF THREADED AND NO-THREAD UNILET BODIES

Furnished with Fastening Screws

STEEL COVERS



For square handle tumbler and toggle flush switches.

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
7963	50	12	*



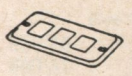
For Arrow, Bryant, Connecticut and General Electric tumbler and toggle flush switches, with guard.

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
7963-A	50	13	*



For one P&S-Despard, Bryant "IL" and Hubbell Interchangeable wiring device. Complete with single-opening strap.

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
7965	50	13	*



For 2 or 3 P&S-Despard, Bryant "IL" and Hubbell Interchangeable wiring devices (complete with 3-opening strap.)

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
7965-A	50	13	*



For Arrow No. 556 Combination receptacle and tumbler switch.

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
7967	50	12	*



For round flush plug receptacles.

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
7969	50	12	*



For round flush plug receptacles.

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
7970	50	15	*



For standard 2 or 3-wire duplex receptacles.

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
7976	50	11	*

For conduit box receptacles, 1⅜ inch hole and screw holes 1$\frac{11}{16}$ inches center to center.



Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
7978	50	12	*



For conduit box receptacles, 1⅝-inch hole.

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
7980	50	12	*

Cadmium finish is the standard finish.

*See Price List

UNILET SINGLE-GANG COVERS

FOR FS AND FD SERIES OF THREADED AND NO-THREAD UNILET BODIES

Furnished with Fastening Screws

STEEL COVERS—Cont'd.

For G.E. receptacle GE-996, Hubbell 7410.



Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
7983	50	12	*

Blank metal.



Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
7986	50	13	*

For pilot lamp flush receptacles (with ruby jewel†).



Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
7987	50	14	*

CAST COVERS

For round flush receptacles (with spring door)—with gasket.



Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
7988	50	44	*

For round flush receptacles.



Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
7989	50	26	*

For square handle toggle switches.



Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
7990	50	28	*

For square handle toggle switches (with protecting guard.)



Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
7990-A	50	31	*

†Covers with Olive Green, Emerald, Canary, Amethyst, Amber, Topaz, Opal, Frosted, Clear or Blue Jewels can be furnished at $1.00 list each if specified on orders.

CAST COVERS

With Receptacle for Standard Attachment Plug Cap

15-Amp., 125-Volt, or 10-Amp., 250-Volt

With Spring Door — With Gasket



Cat. No.	Description	Std. Pkg.	Pkg. Wt.	Price Each
7993	2-Wire, 2-Pole	25	30	*
7993A	2-Wire, 3-Pole*	25	31	*
7993B	3-Wire, 3-Pole	25	32	*

Without Door



Cat. No.	Description	Std. Pkg.	Pkg. Wt.	Price Each
7994	2-Wire, 2-Pole	25	19	*
7994A	2-Wire, 3-Pole*	25	20	*
7994B	3-Wire, 3-Pole	25	21	*

With Brass Cap — With Gasket



Cat. No.	Description	Std. Pkg.	Pkg. Wt.	Price Each
7992	2-Wire, 2-Pole	25	42	*
7992A	2-Wire, 3-Pole*	25	43	*
7992B	3-Wire, 3-Pole	25	44	*

With Ruby Jewel† — With Gasket

For pilot lamp flush receptacles.



Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
7991	50	28	*

* Third pole grounded.

† Covers with Olive Green, Emerald, Canary, Amethyst, Amber, Topaz, Opal, Frosted, Clear or Blue Jewels can be furnished at an additional charge if specified on orders.

Cadmium finish is the standard finish.

*See Price List

APPLETON ELECTRIC COMPANY

UNILET SINGLE-GANG COVERS

FOR FS AND FD SERIES OF THREADED AND NO-THREAD UNILET BODIES

Furnished with Fastening Screws

CAST VAPORTIGHT COVERS

With Gaskets

For single-gang FS and FD series of threaded malleable Unilet Bodies. Take toggle flush, double push button, momentary contact switches, etc.



For double push button switches.

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
8140	25	16	*



For momentary contact switches.

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
8141†	25	16	*



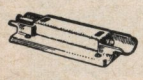
For key operation with standard double push button switches. With key.

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
8142	25	15	*



For square handle tumbler and toggle flush switches.

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
8144	25	16	*



For square handle tumbler and toggle flush switches, (with guards).

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
8144-B	25	16	*

†For use on "FD" Series Single-gang Unilets only.

For single-gang FS and FD series of threaded malleable Unilet Bodies. Take toggle flush, double push button, momentary contact switches, etc.



No. 8149 Cover. For Switches and Starters as follows:

Arrow H. & H. Cat. No. 100006 2-pole, 30-amp., 250-volt; Arrow H. & H. Cat. No. 80162 2-pole, 5-amp., 600-volt.

Arrow Type "C" Switches, 20-amp., 250-volt, Cat. Nos. 6301, 6302, 6303, 6304, 6306; Arrow Type "C" Switches, 30-amp., 250-volt, Cat. Nos. 6464, 6465, 6466, 6467, 6469.

Bryant Type "T" 20-amp., 250-volt, Cat. Nos. 5421, 5422, 5423, 5424; Bryant Type "T" 30-amp., 250-volt, Cat. Nos. 5431, 5432, 5433, 5434, 5436.

Trumbull Manual Starters, Cat. Nos. 2227-S, 2228-S, 2328-S; Trumbull "TT" Manual Starters, Cat. Nos. 1100-S to 1112-A and 1200-S to 1212-S.

Cat. No.	Description	Std. Pkg.	Pkg. Wt.	Price Each
8149	For use on "FD" Series Single-Gang Unilet only	25	20	*



Blank cover.

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
8145	25	13	*



Rocker type for square handle tumbler and toggle flush switches.

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
8148	25	16	*

Cadmium finish is the standard finish.

*See Price List

FS-FD THREADED UNILET BODIES

TWO-GANG—SHALLOW AND DEEP

For Use with Rigid Conduit (Heavy Wall)

Take covers and deep or shallow flush rectangular wiring devices. Furnished without screws for wiring devices.

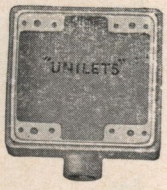
Overall dimensions of body, exclusive of hubs: width, 4⅝ inches; height, 4$\frac{5}{16}$ inches; depth, shallow type, 2 inches; depth, deep type, 2$\frac{1}{16}$ inches.

Type FS—Shallow

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs Std. Pkg.	Price Each
6625	½	25	57	*
6630	¾	15	36	*
6635	1	5	13	*

Type FSA—Shallow

6628	½	25	63	*
6634	¾	15	33	*
6639	1	5	13	*



Type FD—Deep

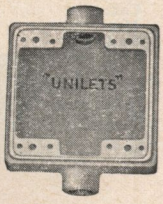
16625	½	25	67	*
16630	¾	15	44	*
16635	1	5	16	*

Type FDA—Deep

16628	½	25	67	*
16634	¾	15	44	*
16639	1	5	16	*

Type FSC—Shallow

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
6626	½	25	59	*
6631	¾	15	37	*
6636	1	5	14	*

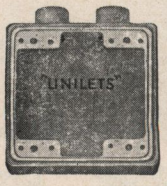


Type FDC—Deep

16626	½	25	69	*
16631	¾	15	45	*
16636	1	5	17	*

Type FSS—Shallow

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
6629	½	25	61	*
6633	¾	15	36	*
6638	1	5	13	*

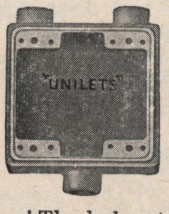


Type FDS—Deep

16629	½	25	69	*
16633	¾	15	45	*
16638	1	5	17	*

Type FSD—Shallow

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
6627	½	25	62	*
6632	¾-½†	15	34	*
6637	1-½†	5	15	*



Type FDD—Deep

16627	½	25	70	*
16632	¾-½†	15	45	*
16637	1-½†	5	17	*

†The hubs at the top are ½-inch.

Cadmium finish is the standard finish.

*See Price List

APPLETON ELECTRIC COMPANY

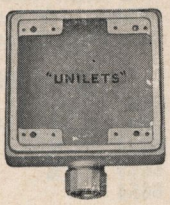
FS NO-THREAD UNILET BODIES

TWO-GANG — SHALLOW

For Use with Rigid Conduit (Heavy-Wall) and Threadless Thin-Wall Conduit

Take covers and shallow flush rectangular wiring devices. Furnished without screws for wiring devices. Overall dimensions of body exclusive of hubs: width 4⅝ inches; height 4 1/16 inches; depth 2 inches.

TYPE FS



For Rigid Conduit

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
66N25	½	25	59	*
66N30	¾	15	37	*
66N35	1	5	15	*

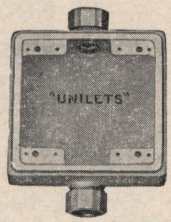
For Thin-Wall Conduit

66T25	½	25	59	*
66T30	¾	15	37	*
66T35	1	5	15	*

TYPE FSA

For Rigid Conduit					For Thin-Wall Conduit
66N28	½	25	63	*	66T28
66N34	¾	15	40	*	66T34
66N39	1	5	15	*	66T39

TYPE FSC



For Rigid Conduit

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
66N26	½	25	65	*
66N31	¾	15	41	*
66N36	1	5	15	*

For Thin-Wall Conduit

66T26	½	25	65	*
66T31	¾	15	41	*
66T36	1	5	15	*

TYPE FSS

For Rigid Conduit				For Thin-Wall Conduit
66N29	½	25	64	66T29
66N33	¾	15	39	66T33
66N38	1	5	15	66T38

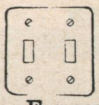
TYPE FSD

66N27	½	25	67		66T27
66N32	¾	15	35		66T32
66N37	1	5	16		66T37

UNILET TWO-GANG COVERS

FOR FS AND FD SERIES OF THREADED AND NO-THREAD UNILET BODIES
Furnished with Fastening Screws

STEEL COVERS

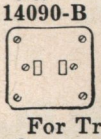


For square handle tumbler and toggle flush switches.

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
14090	25	10	*

For square handle toggle flush switches (with protecting guard).

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
14090-B	25	11	*



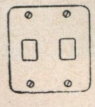
For Dugle flush tumbler switch.

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
14062	25	10	*



For Trigle Flush Tumbler Switch.

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
14063	25	10	*



For two P&S-Despard, Bryant "IL" and Hubbell Interchangeable wiring devices (with single-opening strap).

Cat. No.	Std Pkg.	Wt. Lbs. Std. Pkg.	Price Each
14065	25	11	*

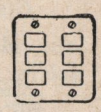
Cadmium finish is the standard finish.

*See Price List

UNILET TWO-GANG COVERS

FOR FS AND FD SERIES THREADED AND NO-THREAD UNILET BODIES
Furnished with Fastening Screws

STEEL COVERS



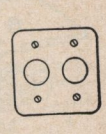
For four or six P&S-Despard, Bryant "IL" and Hubbell Interchangeable wiring devices (with 3-opening strap).

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
14066	25	11	*



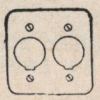
For round flush receptacles. (Without lift cover.)

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
14053	25	10	*



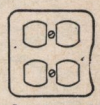
For Hubbell 2-wire No. 7210 or 3-wire No. 7310 Twist-Lock flush receptacles.

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
14053-A	25	10	*



For round flush receptacles. (With lift cover.)

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
14054	25	12	*



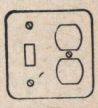
For standard duplex flush receptacles.

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
14058	25	8	*



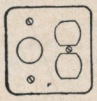
For toggle flush switches and round flush receptacles. (Without lift cover.)

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
14075	25	10	*



For toggle flush switches and standard duplex flush receptacles.

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
14076	25	10	*



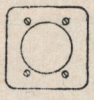
For round flush receptacles and standard duplex flush receptacles.

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
14083	25	10	*



For round flush receptacles and pilot lamp flush receptacles, (ruby jewel.)‡

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
14095	25	12	*



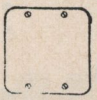
For Hubbell 2-wire 30 amp. polarized flush receptacle No. 7070.

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
14097	25	10	*



For Hubbell 3-wire, 30 amp. No. 7112 and 4-wire, 60 amp. No. 7301 polarized flush receptacles.

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
14098†	25	10	*



Blank metal.

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
14089	25	11	*

MALLEABLE COVER — WITHOUT GASKET



For square handle toggle switches. (With protecting guard).

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
8167	15	13	*

MALLEABLE VAPORTIGHT COVERS

With Gaskets



For double push button switches.

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
8160	15	22	*

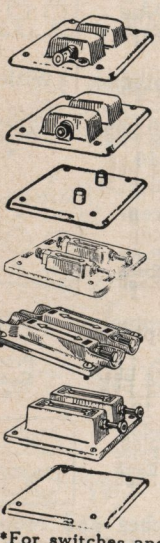
Cadmium finish is the standard finish.

*See Price List

APPLETON ELECTRIC COMPANY

UNILET TWO-GANG COVERS
FOR FS AND FD SERIES OF THREADED AND NO-THREAD UNILET BODIES
Furnished with Fastening Screws
STEEL COVERS

MALLEABLE VAPORTIGHT COVERS with GASKETS



Designed for momentary contact switches.
8161† 15 21 *

For key operation with standard double push button switches (with key).
8162 15 20 *

With stuffing box for Arrow push and pull switches with operating handles, 6010 to 6013 and 6043 to 6052.
8163 15 14 *

For square handle tumbler and toggle flush switches.
8164 15 26 *

For square handle tumbler and toggle flush switches (with guards).
8164-B 15 33½ *

For switches and Starters as listed below(*).
8164-A† 15 31 *

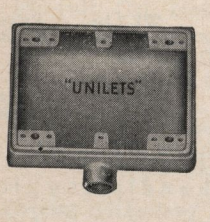
Blank, two-gang cover.
8165 15 13 *

*For switches and Starters as follows:
Arrow H&H No. 100006 2-pole, 30-amp., 250-volt. Arrow H&H No. 80162 2-pole, 5-amp., 600 volt.
Arrow Type "C" Switches, 20-amp., 250-volt, Nos. 6301, 6302, 6303, 6304, 6306; Arrow Type "C" Switches, 30-amp., 250-volt, Nos. 6464, 6465, 6466, 6467, 6469.
Bryant Type "T" 20-amp., 250-volt, Nos. 5421, 5422, 5423, 5424; Bryant Type "T" 30-amp., 250-volt, Nos. 5431, 5432, 5433, 5434, 5436.
Trumbull Manual Starters, Nos. 2227-S, 2228-S, 2328-S, 2361-S; Trumbull "TT" Manual Starters, Nos. 1100-S to 1112-A and 1200-S to 1212-S.
†For use with two-gang "FD" series Unilets only.
‡Covers with olive green, emerald, canary, amethyst, amber, topaz, opal, frosted, clear or blue jewels, can be furnished if specified on orders.
Cadmium finish is the standard finish.
*See Price List

FS-FD THREADED UNILET BODIES
THREE-GANG — SHALLOW AND DEEP
For Use with Rigid Conduit (Heavy-Wall)

Take covers and shallow or deep flush rectangular wiring devices. Furnished without screws for wiring devices.

Overall dimensions of body, exclusive of hubs: Width, 6 7/16 inches; height, 4 7/16 inches. Depth shallow type, 2 inches; deep type, 2 11/16 inches.

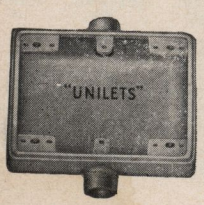


Type FS—Shallow

Cat. No.	Size In	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
6640	½	10	36	*
6645	¾	10	35	*
6650	1	5	19	*

Type FD—Deep

16640	½	10	37	*
16645	¾	10	38	*
16650	1	5	20	*



Type FSC—Shallow

Cat. No.	Size In	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
6641	½	10	39	*
6646	¾	10	37	*
6651	1	5	20	*

Type FDC—Deep

16641	½	10	38	*
16646	¾	10	39	*
16651	1	5	21	*

FS-FD THREADED UNILET BODIES
THREE-GANG — SHALLOW AND DEEP
For Use with Rigid Conduit (Heavy-Wall)

Take covers and shallow or deep flush rectangular wiring devices. Furnished without screws for wiring devices.

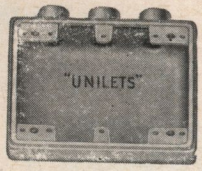
Overall dimensions of body, exclusive of hubs: Width, 6 7/16 inches; height, 4 7/16 inches. Depth shallow type, 2 inches; deep type, 2 11/16 inches.

Type FSS—Shallow

Cat. No.	Size In	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
6644	½	10	38	*
6649	¾	10	38	*
6654	1	5	22	*

Type FDS—Deep

16644	½	10	39	*
16649	¾	10	40	*
16654	1	5	21	*



FS NO-THREAD UNILET BODIES
THREE-GANG ——SHALLOW
For Use with Rigid Conduit (Heavy-Wall) and Threadless Thin-Wall Conduit

Take covers and shallow flush rectangular wiring devices. Furnished without screws for wiring devices.

Overall dimensions of body, exclusive of hubs: Width, 6 7/16 inches; height, 4 7/16 inches; depth, 2 inches.

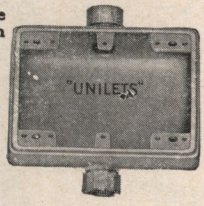
TYPE FS
For Rigid Conduit (Heavy-Wall)

Cat. No.	Size In	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
66N40	½	10	36	*
66N45	¾	10	37	*
66N50	1	5	20	*
For Threadless Thin-Wall Conduit				
66T40	½	10	36	*
66T45	¾	10	37	*
66T50	1	5	20	*



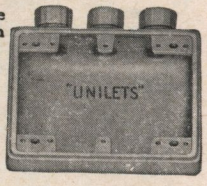
TYPE FSC
For Rigid Conduit (Heavy-Wall)

Cat. No.	Size In	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
66N41	½	10	39	*
66N46	¾	10	43	*
66N51	1	5	22	*
For Threadless Thin-Wall Conduit				
66T41	½	10	39	*
66T46	¾	10	43	*
66T51	1	5	22	*



TYPE FSS
For Rigid Conduit (Heavy-Wall)

Cat. No.	Size In	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
66N44	½	10	39	*
66N49	¾	10	40	*
66N54	1	5	28	*
For Threadless Thin-Wall Conduit				
66T44	½	10	39	*
66T49	¾	10	40	*
66T54	1	5	28	*



Cadmium finish is the standard finish.

*See Price List

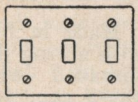
APPLETON ELECTRIC COMPANY

UNILET THREE-GANG COVERS

FOR FS AND FD SERIES OF THREADED AND NO-THREAD UNILET BODIES

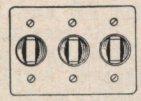
Furnished with Fastening Screws

For square handle tumbler and toggle flush switches.



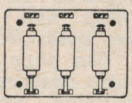
Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
15013	10	14	*

For square handle tumbler and toggle switches (with guard).



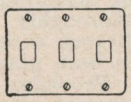
Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
15013-B	10	16	*

For external operation of tumbler and toggle switches with square handle (Cast).



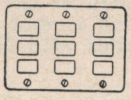
Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
15013-C	10	51	*

For 3 P&S-Despard, Bryant "IL" and Hubbell Interchangeable wiring devices (with 3 single opening straps).



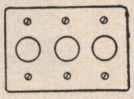
Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
15015	10	15	*

For 6 or 9 P&S-Despard, Bryant "IL" and Hubbell Interchangeable wiring devices (with three 3-opening straps).



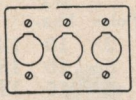
Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
15016	10	15	*

For flush plug receptacles (without lift cover).



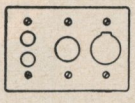
Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
15003	10	14	*

For flush plug receptacles (with lift cover).



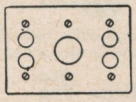
Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
15004	10	16	*

For double push button switches and flush plug receptacles.



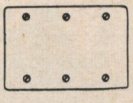
Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
15005	10	15	*

For double push button switches and flush plug receptacles.



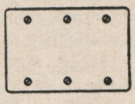
Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
15012	10	14	*

Blank steel cover.



Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
15011-S	10	15	*

Blank cast, with gasket.



Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
15011-C	10	30	*

Cadmium finish is the standard finish.

*See Price List

FS THREADED UNILET BODIES

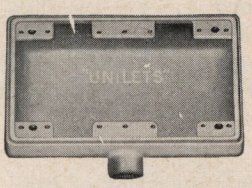
FOUR-GANG—SHALLOW

For Use with Rigid Conduit (Heavy-Wall)

Take covers and shallow flush rectangular wiring devices. Furnished without screws for wiring devices.

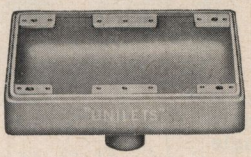
Overall dimensions of body, exclusive of hubs: Width, 8¼ inches; height, 4$\frac{9}{16}$ inches; depth, 2 inches.

TYPE FS—FOUR-GANG



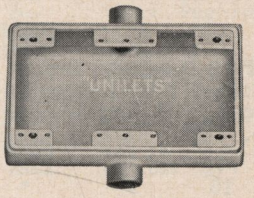
Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
6655	½	10	40	*
6660	¾	10	44	*
6665	1	5	22	*

TYPE FSA—FOUR-GANG



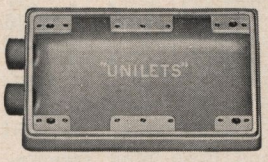
Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
6658	½	10	40	*
6663	¾	10	42	*
6668	1	5	24	*

TYPE FSC—FOUR-GANG



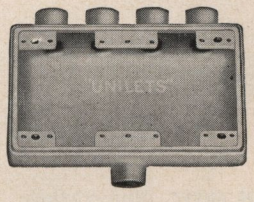
Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
6656	½	10	41	*
6661	¾	10	43	*
6666	1	5	25	*

TYPE FSSE—FOUR-GANG



Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
6659	½	10	41	*
6664	¾	10	43	*
6669	1	5	25	*

TYPE FSD—FOUR-GANG



Cat. No.	Size In.	Std. Pkg.	Pkg. Wt.	Price Each
6657	½	10	42	*
6662	¾–½†	10	44	*
6667	1 –½†	5	26	*

†The hubs at the top in the illustration are ½-inch.

Cadmium finish is the standard finish.

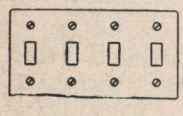
*See Price List

APPLETON ELECTRIC COMPANY

UNILET FOUR-GANG COVERS

FOR FS SERIES OF THREADED UNILET BODIES

Furnished with Fastening Screws

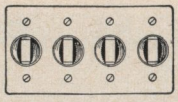


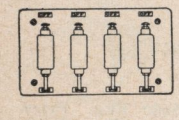
For square handle tumbler and toggle flush switches.

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
15026	10	8	*

For square handle tumbler and toggle flush switches (with protecting guard).

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
15026-B	10	10	*



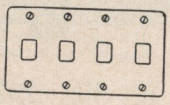


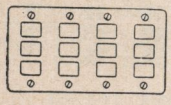
For external operation of tumbler switches with square handles (cast).

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
15026-C	10	25	*

For 4 P&S-Despard, Bryant "IL" and Hubbell Interchangeable wiring devices (with 4 single opening straps).

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
15028	10	9	*



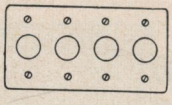


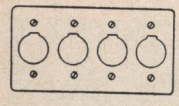
For 8 P&S-Despard, Bryant "IL" and Hubbell Interchangeable wiring devices (with four 3-opening straps).

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
15029	10	9	*

For round flush plug receptacles (without lift cover).

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
15023	10	8	*



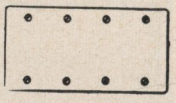


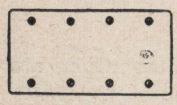
For round flush plug receptacles (with lift cover).

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
15024	10	10	*

Blank steel cover.

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
15025-S	10	9	*





Blank cast cover, with gasket.

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
15025-C	10	40	*

Cadmium finish is the standard finish.

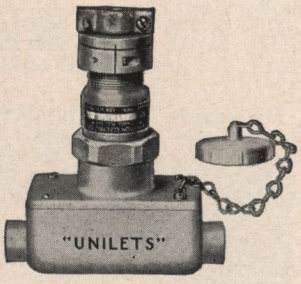
*See Price List

TYPE BRD PLUG RECEPTACLE HOUSINGS

FOR FS AND FD SERIES SINGLE-GANG; FS SERIES TWO-GANG AND SINGLE-GANG EXTENSIONS

Made in four styles: with spring door, plain, threaded and with brass cap, for use on single-gang Unilets of the FS and FD series.

The receptacle is provided with a separate ground terminal thoroughly grounded to Receptacle Housing. The plugs and receptacles are polarized.



Type "FSC" Unilet with Brass Cap Receptacle Housing and Plug

The plug and receptacle contacts are self-aligning, and the receptacle contacts are completely enclosed in a body of insulating material. The prongs of the plug are thoroughly protected by means of a steel sleeve. Branch wires are soldered directly to pole terminals in both plug and receptacle.

Provision is made for grounding wire in cap to connect the frame of the portable device to the shell of the plug used with these receptacles. The grounding or safety circuit is completed through the shell of the plug, the cap, the receptacle housing, and conduit system. This method of grounding complies with N.E.C. standards.

TAKE TYPE BP PLUGS†



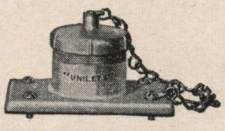


30-Ampere, 250-Volt A.C.*

Poles	Std. Pkg.	With Spring Door: Cat. No.	With Spring Door: Wt. Lbs. Std. Pkg.	With Spring Door: Price Each	Plain: Cat. No.	Plain: Wt. Lbs. Std. Pkg.	Plain: Price Each
2	10	18102	12	*	18112	9	*
3	10	18103	12	*	18113	9	*
4	10	18104	12	*	18114	9	*

FURNISHED WITH GASKETS





30-Ampere, 250-Volt A.C.*

Poles	Std. Pkg.	Threaded: Cat. No.	Threaded: Wt. Lbs. Std. Pkg.	Threaded: Price Each	With Brass Cap: Cat. No.	With Brass Cap: Wt. Lbs. Std. Pkg.	With Brass Cap: Price Each
2	10	18122	9	*	18132	12	*
3	10	18123	9	*	18133	12	*
4	10	18124	9	*	18134	12	*

Cadmium Finish is the standard finish of plug receptacle housings.

This is essential in order to assure perfect ground connections, for the all-metal parts in grounding of safety circuit.

*Can be used on 25-ampere, 125-volt D.C. circuits; or on 30-ampere, 250-volt D.C. circuits if circuit is broken before plug is withdrawn.

†Type BP Plugs are listed on another page.

*See Price List

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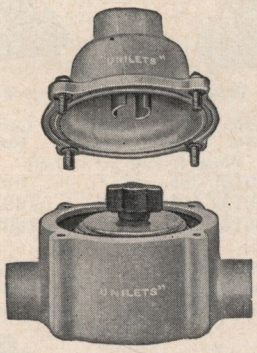
GS SERIES MALLEABLE UNILET BODIES

Take Covers, Convertible Vaportight Fixtures, Plug Receptacle Covers or Fuse Blocks.

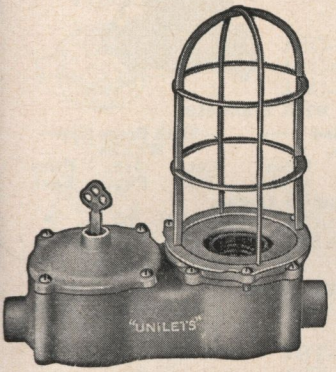
The GS Series of Unilets has been designed to meet those conditions where vapor and moisture exist, as in marine installations or cold storage plants. The top of the Unilet body is flat with an especially wide surface, which provides a good seat for the gaskets in the cover or fixture, insuring a water-tight joint.

The single-gang GS series is provided in two styles, that is with or without lugs. These lugs are also furnished on the two-gang G Series and are drilled for screws to fasten the Unilets in place. Fastening screws are furnished with covers and fixtures and so retained that they cannot fall out.

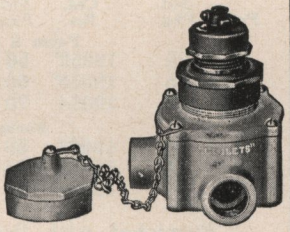
See detailed listing that follows.



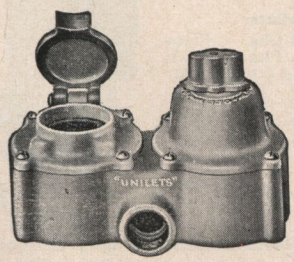
Type "GSC" Unilet with Vaportight Cover and Switch



Type "GSC" Unilet — 2-Gang with Lock Switch Cover and Guard Fixture



Type "GSL" Unilet with Screw Cap Plug Receptacle Cover



Type "GSB" Unilet — 2-Gang with Vaportight Switch Cover and Spring Door Plug Receptacle Cover



Type "GS" Unilet with Spring Door Plug Receptacle Cover

*See Price List

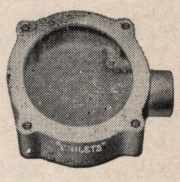
GS SERIES UNILET BODIES

Malleable—Cadmium Finish

FOR USE WITH RIGID CONDUIT (Heavy-Wall)

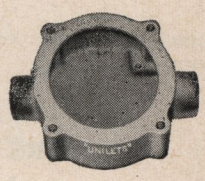
Take covers, fixtures, vaporproof fixtures, plug receptacle housings, etc.

TYPE GS UNILET BODIES



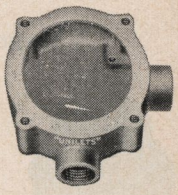
Cat. No.	Size	Std. Pkg.	Wt.Lbs. Std.Pkg.	Price Each
	Form 5 and 10			
16001	½	25	38	*
16021	¾	25	39	*
	Form 20			
16011	½	25	90	*
16031	¾	25	76	*
16041	1	10	40	*

TYPE GSC UNILET BODIES



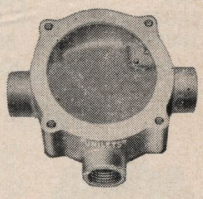
Cat. No.	Size	Std. Pkg.	Wt.Lbs. Std.Pkg.	Price Each
	Form 5 and 10			
16002	½	25	42	*
16022	¾	25	40	*
	Form 20			
16012	½	25	75	*
16032	¾	25	78	*
16042	1	10	30	*

TYPE GSL UNILET BODIES



Cat. No.	Size	Std. Pkg.	Wt.Lbs. Std.Pkg.	Price Each
	Form 5 and 10			
16005	½	25	44	*
16025	¾	25	43	*
	Form 20			
16015	½	25	93	*
16035	¾	25	97	*
16045	1	10	31	*

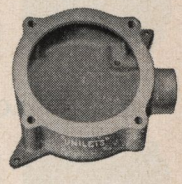
TYPE GST UNILET BODIES



Cat. No.	Size	Std. Pkg.	Wt.Lbs. Std.Pkg.	Price Each
	Form 5 and 10			
16003	½	25	46	*
16023	¾	25	42	*
	Form 20			
16013	½	25	98	*
16033	¾	25	101	*
16043	1	10	33	*

GS SERIES WITH LUGS

TYPE GS WITH LUGS



Cat. No.	Size	Std. Pkg.	Wt.Lbs. Std.Pkg.	Price Each
	Form 5 and 10			
16051	½	25	42	*
16071	¾	25	41	*
	Form 20			
16061	½	25	75	*
16081	¾	25	100	*
16091	1	10	30	*

Form 5 and 10, also 20 indicate sizes of Unilets which take covers and wiring devices correspondingly classified.

*See Price List

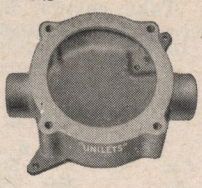
APPLETON ELECTRIC COMPANY

GS SERIES UNILET BODIES

Malleable—Cadmium Finish

FOR USE WITH RIGID CONDUIT (Heavy-Wall)

TYPE GSC WITH LUGS



Cat. No.	Size	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
Form 5 and 10				
16052	½	25	64	*
16072	¾	25	42	*
Form 20				
16062	½	25	102	*
16082	¾	25	105	*
16092	1	10	50	*

TYPE GSL WITH LUGS

Form 5 and 10					Form 20
16055	½	25	68	*	16055
16075	¾	25	73	*	16085
	1	10	33		16095

TYPE GST

16053	½	25	90		16063
16073	¾	25	45		16083
	1	10	41		16093

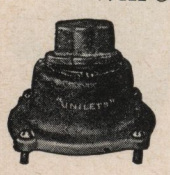
COVERS AND ACCESSORIES

Malleable—Cadmium Finish

FOR GS SERIES UNILET BODIES

Furnished with Gaskets and Screws

VAPORTIGHT SWITCH COVERS

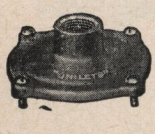


These covers provide a vapor, gas, dust and watertight enclosure for both 5 and 10 amp. switches. The shaft operates in a stuffing box by which it is effectually sealed against all atmospheric conditions. A ratchet stop prevents handle from being turned backward.

Cat. No.	Form	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
18060	5-10	25	28	*
18061	20	25	57	*

Specify wing handles when ordering switches.

VAPORTIGHT HUB COVERS



Cat. No.	Form	Size In.	Std. Pkg.	Wt.Lbs. Std.Pkg.	Price Each
18062	5-10	⅜	25	16	*
18063	5-10	½	25	17	*
18064	20	⅜	25	35	*
18065	20	½	25	38	*

VAPORTIGHT BLANK COVERS



Cat. No.	Form	Std. Pkg.	Wt.Lbs. Std.Pkg.	Price Each
18066	5-10	25	26	*
18067	20	25	36	*

LOCK SWITCH COVER



For Form 5-10 Unilet bodies where the use of key is desirable when used with lock switch attachment.

Cat. No.	Std. Pkg.	Wt.Lbs. Std.Pkg.	Price Each
18068	25	13	*

***See Price List**

TYPE BRG PLUG RECEPTACLES HOUSINGS

FOR GS SERIES UNILETS

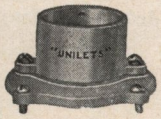
Type BRG Plug Receptacle Housings are made in four styles: with spring door, plain, threaded and with brass cap, for use on Forms 5 and 10, also Form 20 Unilets of the GS series. The receptacle is provided with a separate ground terminal thoroughly grounded to Receptacle Housing. The plugs and receptacles are polarized.

The plug and receptacle contacts are self aligning, and the receptacle contacts are completely enclosed in a body of insulating material. The prongs of plugs are thoroughly protected by means of a steel sleeve. Branch wires are soldered directly to pole terminals in both plug and receptacle. Provision is made for a grounding wire in the cap to connect the frame of the portable device to the shell of the plug used with these receptacles. The grounding of safety circuit is completed through the shell of the plug, the cap, the receptacle housing, and conduit system. This method of grounding complies with N.E.C. standards.

TAKE TYPE BP PLUGS

30-Amp., 250-Volt., A.C.* Receptacles





		—With Spring Door—			—Plain—		
Poles	Std. Pkg.	Cat. No.	Wt.Lbs. Std. Pkg.	Price Each	Cat. No.	Wt.Lbs. Std. Pkg.	Price Each
Form 5 and 10 Unilets							
2	25	19012	85	*	19032	50	*
3	25	19013	95	*	19033	60	*
4	25	19014	105	*	19034	70	*
Form 20 Unilets							
2	25	19022	115	*	19042	80	*
3	25	19023	125	*	19043	85	*
4	25	19024	135	*	19044	90	*





Furnished with Gaskets

		—Threaded—			—With Brass Cap—		
Poles	Std. Pkg.	Cat. No.	Wt.Lbs. Std. Pkg.	Price Each	Cat. No.	Wt.Lbs. Std. Pkg.	Price Each
Form 5 and 10 Unilets							
2	25	19052	50	*	19072	70	*
3	25	19053	60	*	19073	85	*
4	25	19054	70	*	19074	100	*
Form 20 Unilets							
2	25	19062	80	*	19082	100	*
3	25	19063	85	*	19083	115	*
4	25	19064	90	*	19084	130	*

Furnished with Brass Cap and Gasket



Poles	Cat. No.	Std. Pkg.	Wt.Lbs. Std. Pkg.	Price Each
Form 5 and 10 Unilets				
2	19202	25	....	*
3	19203	25	....	*
4	19204	25	....	*
Form 20 Unilets				
2	19212	25	....	*
3	19213	25	....	*
4	19214	25	....	*

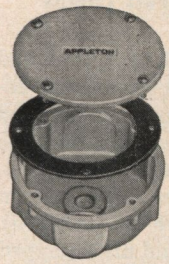
Cadmium finish is the standard finish of plug receptacle housings.

***Can be used on 25-amp., 125-volt D.C. circuits; or on 30-amp., 250-volt D.C. circuits if circuit is broken before plug is withdrawn.**

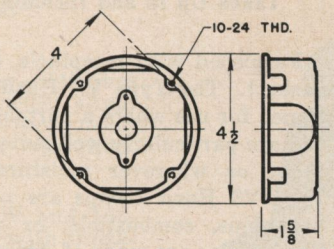
***See Price List**

APPLETON ELECTRIC COMPANY

TYPE JB VAPORTIGHT UNILETS
WITHOUT LUGS—JUNCTION FITTINGS
Standard 4½-Inch Diameter—1½-Inch Deep



Type "JB" Without Lugs



The Type "JB" Vaportight Unilets listed below are furnished without lugs, as shown in illustration to the left. They are standard 4½-inch diameter watertight fittings, 1½-inches deep, and as shown in listing below are furnished in malleable iron.

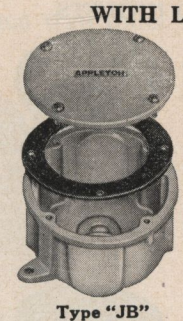
The "JB" Vaportight Unilets can be supplied either without any tapping, or hubs can be tapped according to tapping arrangements shown.

Tapping Arrangements **Malleable Iron**

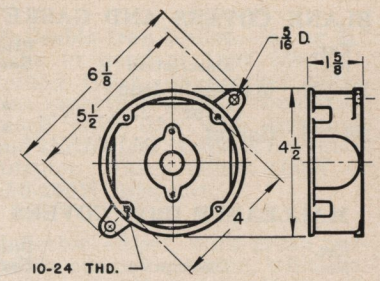
	Size Tap Inches	Body Only Cat. No.	Price Each
Type A	½	JBA-1	*
	¾	JBA-2	*
Type E	½	JBE-1	*
	¾	JBE-2	*
	1	JBE-3	*
Type C	½	JBC-1	*
	¾	JBC-2	*
	1	JBC-3	*
Type L	½	JBL-1	*
	¾	JBL-2	*
	1	JBL-3	*
Type T	½	JBT-1	*
	¾	JBT-2	*
	1	JBT-3	*
Type X	½	JBX-1	*
	¾	JBX-2	*
	1	JBX-3	*
No Tapping		JB-100	*

Malleable Iron—Cadmium Finish.
*See Price List

TYPE JB VAPORTIGHT UNILETS
WITH LUGS—JUNCTION FITTINGS



Type "JB" With Lugs



Standard 4½-Inch Diameter—1½-Inch Deep

The Type "JB" Vaportight Unilets listed below are furnished with lugs, as shown in illustration above. They can be supplied either without any tapping, or hubs can be tapped according to tapping arrangements shown.

Tapping Arrangements **Malleable Iron**

	Size Tap Inches	Body Only Cat. No.	Price Each
Type A	½	JBA-15	*
	¾	JBA-25	*
Type E	½	JBE-15	*
	¾	JBE-25	*
	1	JBE-35	*
Type C	½	JBC-15	*
	¾	JBC-25	*
	1	JBC-35	*
Type L	½	JBL-15	*
	¾	JBL-25	*
	1	JBL-35	*
Type T	½	JBT-15	*
	¾	JBT-25	*
	1	JBT-35	*
Type X	½	JBX-15	*
	¾	JBX-25	*
	1	JBX-35	*
No Tapping		JB-500	*

Malleable Iron—Cadmium Finish.
*See Price List

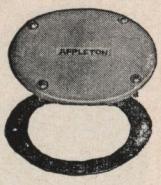
APPLETON ELECTRIC COMPANY

COVERS, GASKETS AND ADAPTERS

FOR ALL TYPES JB AND JBD UNILETS

BLANK COVERS AND GASKET

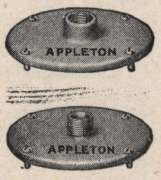
Cat. No.	Description	Price Each
JB-501	Malleable Iron Cover	*
JB-503	Gasket	*



MALLEABLE IRON COVERS

Cat. No.	Description	Price Each
JB-504	With ½-inch Female Nipple....	*
JB-505	With ½-inch Male Nipple.....	*

Cadmium Finish.



ADAPTER

Malleable Iron — With JB-503 Gasket

To Adapt Form 5-10 Covers, Receptacle Housings and Lighting Fixtures for GS Series Unilets to JB and JBD Unilets. Also Type GS Flexible Fixture Hangers.

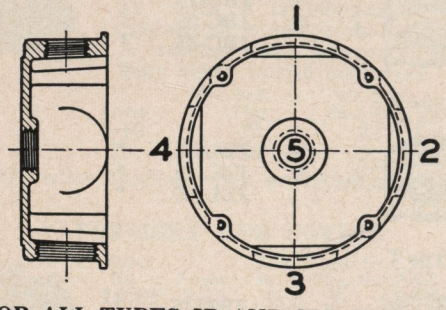
Cat. No.	Description	Price Each
JB-506	Adapter	*

Cadmium Finish.



JB-506

SPECIFICATIONS FOR SPECIAL TAPPING ARRANGEMENTS



FOR ALL TYPES JB AND JBD UNILETS

When the types "JB" and "JBD" Unilets are required with special tapping combinations not covered by the tapping arrangements shown in the "JB" and "JBD" listings, the following code can be used to specify size and position of outlets.

CODE—Entrances as shown in diagram above are marked for position only as 1, 2, 3, 4 and 5.

EXAMPLE—In specifying, simply start with entrance No. 1 and give the size to be tapped, and similarly specify the size of each entrance in turn; as for example: No. 1—½-inch; No. 2—¾-inch; No. 3—1-inch; No. 4—Blank; No. 5—½-inch.

TAPPING CHARGE—Add to list price of unit without tapping $0.15 for each ½ in. outlet, $0.23 for each ¾ in., and $0.30 for 1 in.

*See Price List

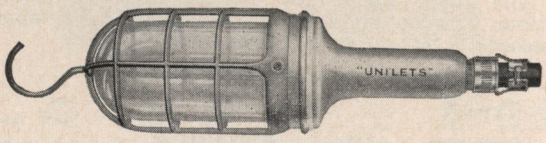
TYPE VS HAND LAMPS

WITH REGULAR CLEAR GLOBE

Takes Up to and Including 100-Watt Lamps

Furnished with receptacle, clear globe, guard and gasket†. The Type VS Hand Lamps have been designed for use where a portable extension is required and are particularly well suited for garages, machine shops or wherever moisture or dust is present. Type VS Hand Lamps are not intended for use in hazardous, combustible, or explosive atmospheres. The handles are made of Aluminum and are equipped with a vaportight cord connection and cord grip.

The Hand Lamps listed below are regularly furnished with Porcelain Receptacles. Composition Receptacles will be furnished if specified on orders at no additional cost.



With Globe and Guard

Cat. No.	Size Lamp	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
1190	Up to 100 Watts.....	10	48	*
1195	25–40 Watts	10	44	*

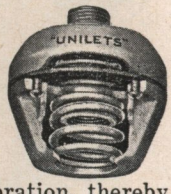
Without Globe and Guard

1197	Up to 100 Watts.....	10	18	*

CUSHION FIXTURE HANGERS

Malleable—Cadmium Finish
For Use with Rigid Conduit (Heavy Wall)

TYPE AHG VAPORPROOF CUSHION FIXTURE HANGERS



The Type AHG is a Vaporproof Fixture Hanger with a spring cushion designed to carry the weight of the lighting fixture and, incidentally, absorbs all building or factory vibration. By this spring cushion suspension, fixture hangs plumb and motionless and lamp filaments are free from shock or vibration, thereby materially increasing the life of the lamp bulb.

For ½-inch Conduit Stem

Total Fixture Wt. Lbs.	Std. Pkg.	Cat. No.	with ½-Inch Male Nipple Pkg. Wt.	with ½-Inch Male Nipple Price Each	With ¾-Inch Male Nipple Cat. No.	With ¾-Inch Male Nipple Pkg. Wt.	With ¾-Inch Male Nipple Price Each
2 to 4	25	1385	45	*	1390	46	*
4 to 8	25	1386	45	*	1391	46	*
8 to 16	25	1387	45	*	1392	46	*
16 to 30	25	1388	48	*	1393	50	*

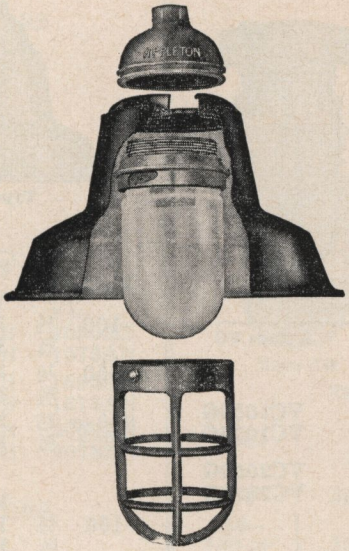
*See Price List

APPLETON "V-51" SERIES CONVERTIBLE VAPORTIGHT LIGHTING FIXTURES

FOR USE WITH RIGID CONDUIT (HEAVY-WALL)

PATENTS
2,749,433
2,749,435

100 Watt or 150-200 Watt Units



Neoprene Rubber Ring—Attaches reflector to Unilet with slight twisting pressure—no tools needed; cushions against vibration.

Globe Adapter — 100W and 150-200W sizes; complete with shock-absorbing socket; collector ring contact assembly; vaportight gasket; threaded for Navy standard vaportight globes; two cavities to receive snap type Guard.

Vaportight Globe — 100W or 150-200W sizes in clear glass or various colors; also heat-resisting type.

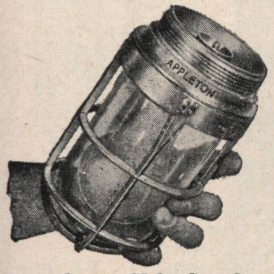
Malleable Iron Unilet—½" or ¾" hubs in pendant type (shown), ceiling types, or bracket types. Has vaportight gasket; connecting block with line wire terminals and spring leaf contacts for Globe Adapter. Takes either 100W or 150-200W Adapters.

Reflector—Steel, with green porcelain enamel exterior, white interior; standard dome (shown), shallow dome, deep bowl or angle types; sized for 100W, 150W or 200W lamps.

Guard — Die cast aluminum with two sealed ball plunger units that snap securely into cavities in Globe Adapter. When turned counter-clockwise, Guard acts as tool for easy removal of Adapter and Globe assembly in one operation, as in re-lamping.

Setting a New Standard in Vaportight Fixture Design and Construction

- **Exclusive Unit Construction for Simplified Re-lamping.**
- **Unique Reflector Attachment — Quickly On or Off without Tools.**
- **Instantly Convertible for 100 Watt or 150-200 Watt Lamp Units.**



Adapter-Globe-Guard Unit Assembly

Re-engineered throughout, the new "V-51" Series Appleton Vaportight lighting Fixtures incorporate advantages to the user beyond all previous designs. For example, re-lamping is as simple as A-B-C, thanks to the new unit-assembly principle. Removing or replacing reflectors, too, becomes a split-second task — no clamps or set-screws, no tools needed.

UNILETS — Made of rugged malleable iron, the Unilet bodies have ½- or ¾-inch hubs in every needed arrangement for pendant mounting, ceiling mounting or bracket mounting. Unilets are furnished with a connecting block having terminals for line wires, and spring leaf contacts to the center pin and collector ring assembly in the Globe Adapter. Conversion is simple because Unilets take either 100W or 150-200W Adapters.

GLOBE ADAPTERS—In 100W or 150-200W sizes, complete with vaportight shock-absorbing socket and gasket to form vaportight seal with globe. Has collector ring assembly to make wireless contact with Unilet, and is designed to take Navy standard vaportight globes in clear glass, colored or heat-resisting types. Has two cavities into which guard snaps. NOTE: We recommend purchase of at least one spare VU-100 or VU-200 Adapter-Globe-Guard assembly in order to take advantage of the simplified re-lamping method.

GUARD — Sturdy die-cast aluminum construction with two sealed ball plunger units which snap into cavities in the Adapter with a twist of the wrist — no clamps or set-screws. Constructed to be used as a tool when turned counter-clockwise, removing complete Adapter-Globe-Guard assembly in one operation. NOTE: In installations not employing guards, a VGU-1 or VGU-2 guard should be purchased strictly for tool use.

REFLECTORS—Available in standard dome, shallow dome, deep bowl or angle types, green baked porcelain enamel outside, white inside. Have unique attachment feature, consisting of a neoprene rubber ring which snaps securely into groove in Unilet with slight twisting pressure. This ring also acts as a cushion against vibration and as added protection against moisture.



Reflector Attachment

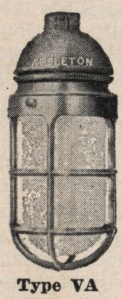
"V-51" SERIES CONVERTIBLE VAPORTIGHT FIXTURES

FOR USE WITH RIGID CONDUIT (HEAVY-WALL)

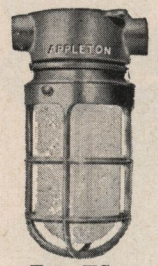
100 Watt or 150-200 Watt Units



Type V



Type VA



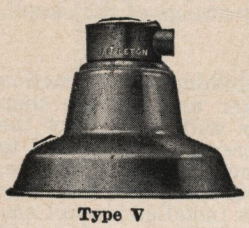
Type VC

Watts	Hub Size	Cat. No. Type V	Type VA	Type VC
With Globe and Guard				
100	½	V1050G	VA1050G	VC1050G
	¾	V1075G	VA1075G	VC1075G
150–200 or 300*	½	V2050G	VA2050G	VC2050G
	¾	V2075G	VA2075G	VC2075G
Without Globe and Guard				
100	½	V1050	VA1050	VC1050
	¾	V1075	VA1075	VC1075
150–200 or 300*	½	V2050	VA2050	VC2050
	¾	V2070	VA2075	VC2075

Globe Adapters and Guards are die-cast aluminum.

Regularly furnished with clear globes. Colored globes may be substituted at extra cost.

TYPE V — WITH REFLECTORS



Type V

Note: 300-500 Watt Vaportight Fixtures (non-convertible) are listed on pages 84-85 of the Appleton Lighting Catalog No. 48.

Watts	Hub Size	Cat. No. Standard Dome	Shallow Dome	Deep Bowl	30° Angle
100	½	V1050ST	V1050SH	V1050DB	V1050AN
	¾	V1075ST	V1075SH	V1075DB	V1075AN
150	½	V1550ST	V1550SH	V1550DB	V1550AN
	¾	V1575ST	V1575SH	V1575DB	V1575AN
200 or 300*	½	V2050ST	V2050SH	V2050DB	V2050AN
	¾	V2075ST	V2075SH	V2075DB	V2075AN

*Will take 300 watt Type PS-30 Medium Base lamp.

Above numbers are shipped ready for final assembly.

See a following page for illustrations and diameters of the four reflector styles.

Unilets are Malleable Iron, cadmium finish; Reflectors are steel, green porcelain enamel outside, white enamel inside.

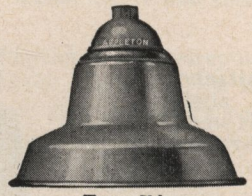
Guards: Above fixtures, reflector style, may be furnished with guards by adding suffix "G" to catalog number, at an advance in price.

Note: In installations not employing guards, we suggest purchase of a VGU-1 or VGU-2 Guard for use as a handy tool.

"V-51" SERIES CONVERTIBLE VAPORTIGHT FIXTURES

FOR USE WITH RIGID CONDUIT (HEAVY-WALL)

100 Watt, 150 Watt and 200 Watt



Type VA



Type VC

Type VA

Watts	Hub Size	Cat. No. Standard Dome	Shallow Dome	Deep Bowl	30° Angle
		VA-	VA-	VA-	VA-
100	½	1050ST	1050SH	1050DB	1050AN
	¾	1075ST	1075SH	1075DB	1075AN
150	½	1550ST	1550SH	1550DB	1550AN
	¾	1575ST	1575SH	1575DB	1575AN
200 or 300*	½	2050ST	2050SH	2050DB	2050AN
	¾	2075ST	2075SH	2075DB	2075AN

Type VC

Watts	Hub Size	Standard Dome	Shallow Dome	Deep Bowl	30° Angle
		VC-	VC-	VC-	VC-
100	½	1050ST	1050SH	1050DB	1050AN
	¾	1075ST	1075SH	1075DB	1075AN
150	½	1550ST	1550SH	1550DB	1550AN
	¾	1575ST	1575SH	1575DB	1575AN
200 or 300*	½	2050ST	2050SH	2050DB	2050AN
	¾	2075ST	2075SH	2075DB	2075AN

TYPES VL, VT AND VX FIXTURES

Without Reflectors



Type VL



Type VT



Type VX

Watts	Hub Size	Cat. No. Type VL	Type VT	Type VX
With Globe and Guard				
100	½	VL1050G	VT1050G	VX1050G
	¾	VL1075G	VT1075G	VX1075G
150–200 or 300*	½	VL2050G	VT2050G	VX2050G
	¾	VL2075G	VT2075G	VX2075G
Without Globe and Guard				
100	½	VL1050	VT1050	VX1050
	¾	VL1075	VT1075	VX1075
150–200 or 300*	½	VL2050	VT2050	VX2050
	¾	VL2075	VT2075	VX2075

*Will take 300 watt Type PS-30 Medium Base lamp.

Globe Adapters and Guards are die-cast aluminum.

Regularly furnished with clear globes. Colored globes may be substituted at extra cost.

Above numbers are shipped ready for final assembly.

See a following page for illustrations and diameters of the four reflector styles.

Unilets are Malleable Iron, cadmium finish; Reflectors are steel, green porcelain enamel outside, white enamel inside.

Guards: Above fixtures, reflector style, may be furnished with guards by adding suffix "G" to catalog number, at an advance in price.

"V-51" SERIES CONVERTIBLE VAPORTIGHT FIXTURES

FOR USE WITH RIGID CONDUIT (HEAVY-WALL)

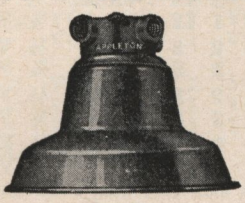
100 Watt, 150 Watt, 200 Watt

TYPE VL — WITH REFLECTORS



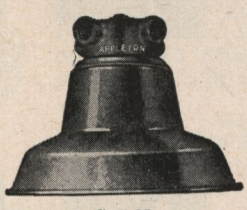
Watts	Hub Size	Cat. No. Standard Dome	Shallow Dome	Deep Bowl	30° Angle
		VL-	VL-	VL-	VL-
100	½	1050ST	1050SH	1050DB	1050AN
	¾	1075ST	1075SH	1075DB	1075AN
150	½	1550ST	1550SH	1550DB	1550AN
	¾	1575ST	1575SH	1575DB	1575AN
200 or 300*	½	2050ST	2050SH	2050DB	2050AN
	¾	2075ST	2075SH	2075DB	2075AN

TYPE VT — WITH REFLECTORS



Watts	Hub Size	Cat. No. Standard Dome	Shallow Dome	Deep Bowl	30° Angle
		VT-	VT-	VT-	VT-
100	½	1050ST	1050SH	1050DB	1050AN
	¾	1075ST	1075SH	1075DB	1075AN
150	½	1550ST	1550SH	1550DB	1550AN
	¾	1575ST	1575SH	1575DB	1575AN
200 or 300*	½	2050ST	2050SH	2050DB	2050AN
	¾	2075ST	2075SH	2075DB	2075AN

TYPE VX — WITH REFLECTORS



Watts	Hub Size	Cat. No. Standard Dome	Shallow Dome	Deep Bowl	30° Angle
		VX-	VX-	VX-	VX-
100	½	1050ST	1050SH	1050DB	1050AN
		1075ST	1075SH	1075DB	1075AN
150	½	1550ST	1550SH	1550DB	1550AN
	¾	1575ST	1575SH	1575DB	1575AN
200 or 300*	½	2050ST	2050SH	2050DB	2050AN
	¾	2075ST	2075SH	2075DB	2075AN

*Will take 300 watt Type PS-30 Medium Base lamp.

Above numbers are shipped ready for final assembly.

Unilets are Malleable Iron, cadmium finish; Reflectors are steel, green porcelain enamel outside, white enamel inside.

Guards: Above fixtures may be furnished with guards by adding suffix "G" to catalog number, at an advance in price.

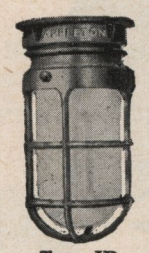
Note: In installations not employing guards, we suggest purchase of a VGU-1 or VGU-2 Guard for use as a handy tool.

"V-51" SERIES CONVERTIBLE VAPORTIGHT FIXTURES

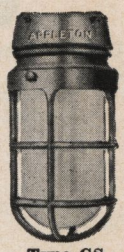
JB and JBW Fixtures Designed to Mount on JB and JBD Unilet Bodies

GS and GSW Fixtures Designed to Mount on GS Unilet Bodies

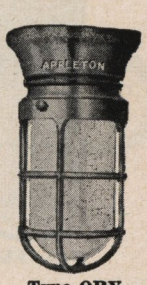
OBV and OBVW Fixtures Designed to Mount on Standard 3¼- and 4-Inch Octagonal Outlet Boxes



Type JB

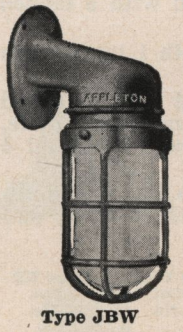


Type GS

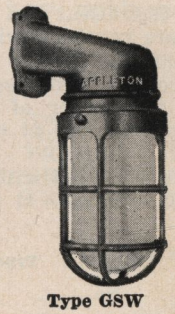


Type OBV

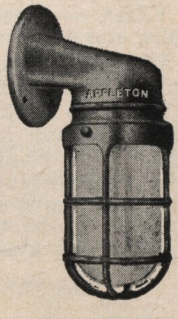
Watts	Type JB Cat. No.	Type GS Form 5-10 Cat. No.	Type GS Form 20 Cat. No.	Type OBV Cat. No.
	With Globe and Guard			
100	JB10G	GS10G	GS102G	OBV10G
150–200 or 300*	JB20G	GS20G	GS202G	OBV20G
	Without Globe and Guard			
100	JB10	GS10	GS102	OBV10
150–200 or 300*	JB20	GS20	GS202	OBV20



Type JBW



Type GSW



Type OBVW

Watts	Type JBW Cat. No.	Type GSW Form 5-10 Cat. No.	Type GSW Form 20 Cat. No.	Type OBVW Cat. No.
	With Globe and Guard			
100	JBW10G	GSW10G	GSW102G	OBVW10G
150–200 or 300*	JBW20G	GSW20G	GSW202G	OBVW20G
	Without Globe and Guard			
100	JBW10	GSW10	GSW102	OBVW10
150–200 or 300*	JBW20	GSW20	GSW202	OBVW20

*Will take 300 watt Type PS-30 Medium Base lamp.

Above numbers are shipped ready for final assembly.

Unilets are Malleable Iron, cadmium finish.

Globe Adapters and Guards are die-cast aluminum.

Regularly furnished with clear globes. Colored globes may be substituted at extra cost.

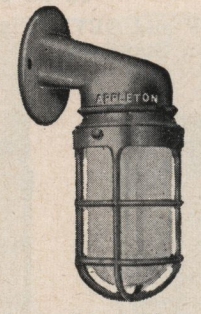
"V-51" SERIES CONVERTIBLE VAPORTIGHT FIXTURES

FOR USE WITH RIGID CONDUIT (HEAVY-WALL)

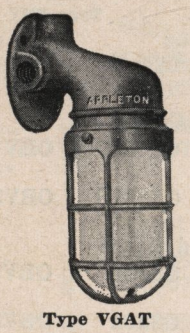
100 Watt or 150-200 Watt Units



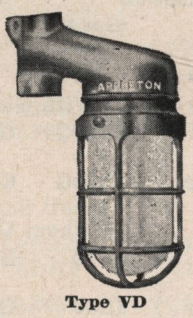
Type VXHA



Type VGA



Type VGAT



Type VD

VXHA — Fixtures are provided with 5 tapped hubs, and 4 close up plugs.

VGA—Fixtures are provided with 1 tapped hub in the center of mounting plate.

VGAT — Fixtures are provided with 4 tapped hubs, one hub in the center of mounting plate, one hub at the top, one hub at each side, and 3 close up plugs.

VD—Fixtures are provided with 2 tapped hubs, one hub at the top, one hub at the bottom, and one close up plug.

Watts	Hub Size	Type VXHA Cat. No.	Type VGA Cat. No.	Type VGAT Cat. No.	Type VD Cat. No.
		With Globe and Guard			
		VXHA-	VGA-	VGAT-	VD-
100	½	1050G	1050G	1050G	1050G
	¾	1075G	1075G	1075G	1075G
150–200 or 300*	½	2050G	2050G	2050G	2050G
	¾	2075G	2075G	2075G	2075G
		Without Globe and Guard			
100	½	1050	1050	1050	1050
	¾	1075	1075	1075	1075
150–200 or 300*	½	2050	2050	2050	2050
	¾	2075	2075	2075	2075

*Will take 300 watt Type PS-30 Medium Base lamp.

Above numbers are shipped ready for final assembly.

Unilets are Malleable Iron, cadmium finish.

Globe Adapters and Guards are die-cast aluminum.

Regularly furnished with clear globes. Colored globes may be substituted at extra cost.

"V-51" SERIES CONVERTIBLE VAPORTIGHT FIXTURES

BODIES FOR "V-51" SERIES CONVERTIBLE VAPORTIGHT FIXTURES

Furnished with No. VPT-7 Connecting Block and No. VPT-4 Gasket

Take either 100 Watt or 150-200 Watt Adapters



V*



VA*



VC*



VL*



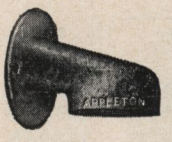
VT*



VX*



VXHA*



VGA



VGAT



VD

Type	Hub Size	Cat. No.	Weight Each Lbs.	Weight Each Oz.	Type	Hub Size	Cat. No.	Weight Each Lbs.	Weight Each Oz.
V*	½	V50	2	2	VX*	½	VX50	2	9
	¾	V75	2	2		¾	VX75	2	9
VA*	½	VA50	1	12	VXHA*	½	VXHA50	3	8
	¾	VA75	1	12		¾	VXHA75	3	8
VC*	½	VC50	2	5	VGA	½	VGA50	3	14
	¾	VC75	2	5		¾	VGA75	3	14
VL*	½	VL50	2	5	VGAT	½	VGAT50	3	14
	¾	VL75	2	5		¾	VGAT75	3	14
VT*	½	VT50	2	7	VD	½	VD50	3	8
	¾	VT75	2	7		¾	VD75	3	8

Above items are malleable iron, cadmium finish.

MOUNTING UNITS FOR "V-51" SERIES FIXTURES

To Fit JB and GS Unilets, Also 3¼" and 4" Octagonal Outlet Boxes

Furnished with No. VPT-7 Connecting Block and No. VPT-4 Gasket

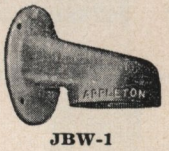
Take either 100 Watt or 150-200 Watt Adapters



JB-1



GS-1



JBW-1



GS-2



GSW-2



GSW-1



OBV-1

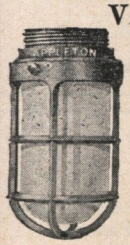


OBVW-1

Cat. No.	Style	Mounts On	Weight Lbs.	Weight Oz.
JB-1	Straight*	JB Unilet	1	12
JBW-1	Bracket	JB Unilet	3	14
GS-1	Straight*	GS Unilet Form 5-10	1	9
GS-2	Straight*	GS Unilet Form 20	1	12
GSW-1	Bracket	GS Unilet Form 5-10	3	8
GSW-2	Bracket	GS Unilet Form 20	3	14
OBV-1	Straight*	3¼" & 4" Octagonal Outlet Box	2	----
OBVW-1	Bracket	Same	3	14

*With groove for neoprene rubber ring attachment of 100, 150 or 200 watt reflectors. Bracket types not designed for reflectors.

PARTS FOR "V-51" CONVERTIBLE VAPORTIGHT FIXTURES



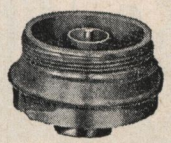
UNIT ASSEMBLY COMPLETE

Consisting of adapter, globe and guard; complete with socket, socket gasket and globe gasket.

Cat. No.	Watts	Wt. Lbs. Each
VU-100	100	2 lbs. 2 oz.
VU-200	150-200 or 300*	4 lbs. 4 oz.

GLOBE AND GUARD ADAPTER BODY

Complete with socket, socket gasket and globe gasket. For adaption to all "V-51" Series Vaportight Fixtures.



Cat. No.	Watts	Wt. Lbs. Each
VAD-1	100	¾
VAD-2	150-200 or 300*	1¼

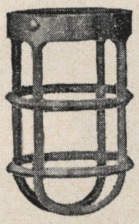
GLOBE ONLY



Globe	100 Watt Cat. No.	100 Watt Wt. Lbs.	150-200 Watt Cat. No.	150-200 Watt Wt. Lbs.
Clear	VGL-1CL	1	VGL-2CL	2
Opal	VGL-1OP	1	VGL-2OP	2
Green	VGL-1GR	1	VGL-2GR	2
Blue	VGL-1BL	1	VGL-2BL	2
Orange	VGL-1OR	1	VGL-2OR	2
Ruby	VGL-1RU	1	VGL-2RU	2
Light Red	VGL-1RE	1	VGL-2RE	2
Amber	VGL-1AM	1	VGL-2AM	2
H.R.*	VGL-1HR	1	VGL-2HR	2

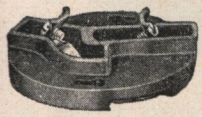
*Heat-resisting.

GUARD



Cat. No.	Watts	Wt. Lbs. Each
VGU-1	100	⅓
VGU-2	150-200 or 300*	1

CONNECTING BLOCK

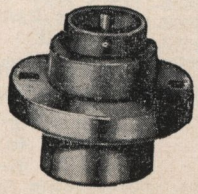


Complete with binding posts for line wires, and spring leaf contacts to collector ring assembly in lamp receptacle.

Cat. No.	Watts	Wt. Oz. Each
VPT-7	100 or 150-200	4

LAMP RECEPTACLE

Complete with shock-absorbing socket and collector ring contact assembly.



Cat. No.	Watts	Wt. Oz. Each
VPT-1	100-150-200 or 300*	5

GASKET



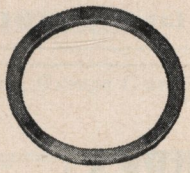
For use with lamp receptacle. Also for 100-watt globe.

Cat. No.	Watts	Wt. Oz. Each
VPT-2	100 or 150-200	½

*Will take 300 watt Type PS-30 Medium Base lamp.

PARTS FOR "V-51" CONVERTIBLE VAPORTIGHT FIXTURES

GASKET



For use with 150-200 watt globe.

Cat. No.	Watts	Wt. Oz. Each
VPT-3	150-200	¼

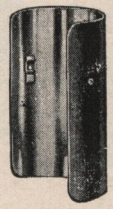
GASKET

For use with Canopy or Unilet.



Cat. No.	Watts	Wt. Oz. Each
VPT-4	100 or 150-200	⅛

HALF SHADE



Cat. No.	Watts	Wt. Oz. Each
VPT-5	100	3
VPT-6	150–200	4

NEOPRENE RUBBER RING

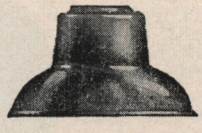
For attached reflector to Unilet.



Cat. No.	Watts	Wt. Oz. Each
VPT-8	100 or 150-200	4

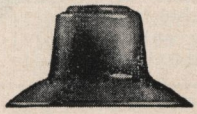
REFLECTORS

Standard Dome



Cat. No.	Lamp Size	Dia. In.	Wt. Lbs. Each
VRE-1ST	100W	12	2
VRE-15ST	150W	14	2¼
VRE-2ST	200W	16	2½

Shallow Dome



Cat. No.	Lamp Size	Dia. In.	Wt. Lbs. Each
VRE-1SH	100W	12	2
VRE-15SH	150W	14	2¼
VRE-2SH	200W	16	2½

Deep Bowl



Cat. No.	Lamp Size	Dia. In.	Wt. Lbs. Each
VRE-1DB	100W	10	2
VRE-15DB	150W	12	2¼
VRE-2DB	200W	12	2½

30° Angle



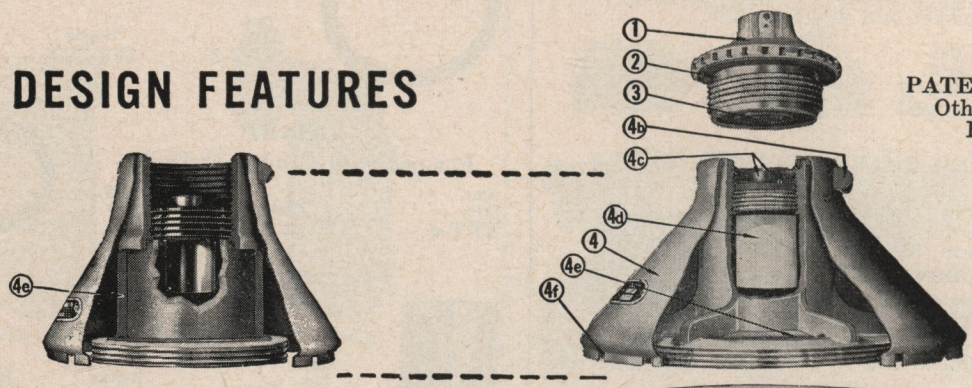
Cat. No.	Lamp Size	Dia. In.	Wt. Lbs. Each
VRE-1AN	100W	10	2
VRE-15AN	150W	12	2¼
VRE-2AN	200W	12	2½

Reflectors are steel, with green baked porcelain enamel outside, white enamel inside.

"AA-51" SERIES APPLETON VENTED TYPE EXPLOSION-PROOF LIGHTING FIXTURES

Listed by Underwriters' Laboratories for Class I, Groups C and D, Hazardous Locations

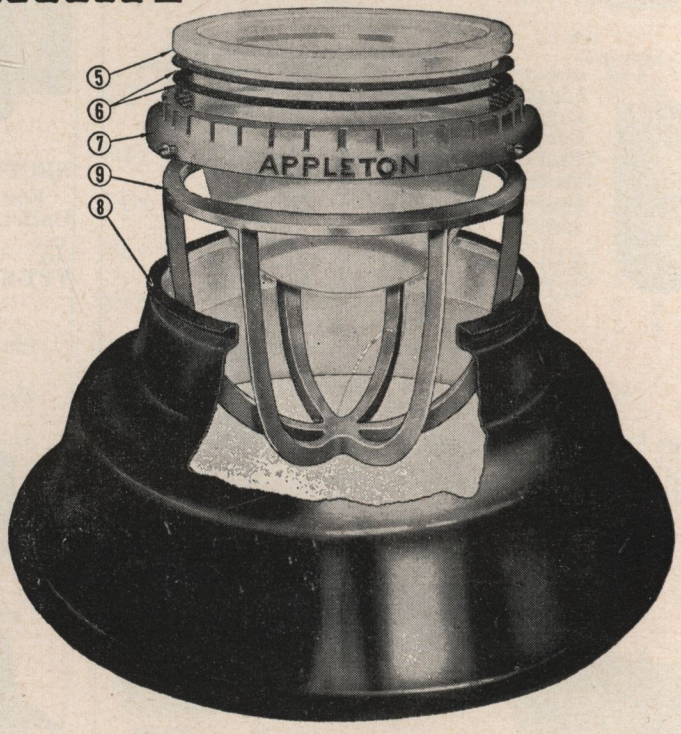
DESIGN FEATURES



PATENT 2,530,135
Other Patents
Pending

ABOVE: Dome Unit Assembly in 60 to 200 Watt fixtures employs porous metal **cylinder** (4e) in place of disc used in 300/500 Watt size. All other parts are identical in design.

RIGHT: Sectional exploded view of 300/500 Watt fixture, showing interior construction and relationship of parts.



1—**Standardized Canopy**—permits mounting of any "AA-51" Series fixture—60 Watt to 500 Watt. Ceiling type, and long and short bracket types are similarly standardized.

2—**Gasket**—for seal between Canopy and Dome Unit Assembly.

3—**Connecting Block** containing recessed spring leaf contacts. Easily removed from Canopy by loosening two screws. Line wires are connected to screw terminals and block replaced.

4—**Dome Unit Assembly**—Exterior is steel, zinc plated and aluminum sprayed; interior is high grade aluminum.

4b. **Release Lug**—by inserting screw driver in Release Lug and into notches in Canopy, entire fixture may be unscrewed from Canopy for cleaning and re-lamping at work bench. Lug has 2 holes for attaching carrying handle—

4c. **Collector Ring and Center Stud**—energized by recessed spring leaf contacts in Connecting Block when fixture is screwed onto Canopy. NOTE: Five full threads are always engaged when contact is made or broken, confining any arcing in approved explosion-proof method if current should accidentally be left on while removing or replacing fixture!

4d. **Shock absorbing socket** prolongs lamp life, guards against loosening through vibration.

4e. **Porous Metal Disc** (in 300/500 Watt), or **Porous Metal Cylinder** (in 60-200 Watt sizes, left above)—acts as flame arrester and permits breathing between Dome Unit Assembly and Globe.

4f. **"Full-Circle" Venting**—entire lower edge of hood serves as louver to aid in even distribution of heat. Notches are for screw driver leverage to release Globe Ring.

5—**Heat and Impact Resisting Glass Globe**—detaches itself from fixture when Globe Ring is unscrewed.

6—**Gasket**—with aluminum reinforcing ring—between Globe and Globe Ring.

7—**Globe Ring**—After taking down fixture as described in 4b, access for re-lamping is easily obtained by inserting screw driver in notches and unscrewing ring.

8—**Reflector**—Steel, with green baked porcelain enamel exterior, white interior—held by three screws and can be easily removed without dismantling fixture.

9—**Guard**—sturdy cast aluminum, secured with screws to Globe Ring.

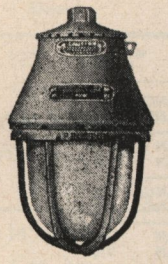
"AA-51" SERIES APPLETON VENTED TYPE EXPLOSION-PROOF LIGHTING FIXTURES

Listed by Underwriters' Laboratories for Class I, Groups C and D, Hazardous Locations

Patent 2,530,135
Other patents pending

DESCRIPTION

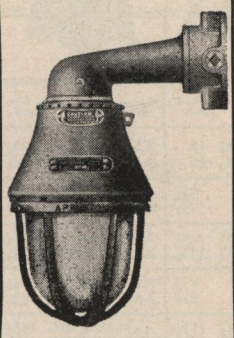
TYPE "AAP" PENDENT MOUNTING



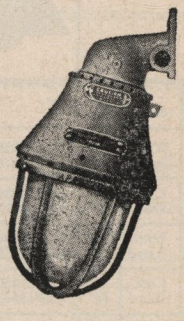
TYPE "AAC" CEILING MOUNTING



TYPE "AALB" LONG BRACKET MOUNTING



TYPE "AASB" SHORT BRACKET MOUNTING



Lamp Size	Style	Hub Size	Cat. No.	Wt. Lbs. Each	Cat. No.	Wt. Lbs. Each	Cat. No.	Wt. Lbs. Each	Cat. No.	Wt. Lbs. Each
60 to 100 Watt	With Guard	½"	AAP-1050G	8¼	AAC-1050G	11½	AALB-1050G	16	AASB-1050G	12
		¾"	AAP-1075G	8¼	AAC-1075G	11½	AALB-1075G	16	AASB-1075G	12
		1"	.....		AAC-1100G	11½	AALB-1100G	16	.....	
	Less Guard	½"	AAP-1050	7¾	AAC-1050	11	AALB-1050	15½	AASB-1050	11½
		¾"	AAP-1075	7¾	AAC-1075	11	AALB-1075	15½	AASB-1075	11½
		1"	.....		AAC-1100	11	AALB-1100	15½	.....	
150 Watt	With Guard	½"	AAP-1550G	8¼	AAC-1550G	11½	AALB-1550G	16	AASB-1550G	12
		¾"	AAP-1575G	8¼	AAC-1575G	11½	AALB-1575G	16	AASB-1575G	12
		1"	.....		AAC-15100G	11½	AALB-15100G	16	.....	
	Less Guard	½"	AAP-1550	7¾	AAC-1550	11	AALB-1550	15½	AASB-1550	11½
		¾"	AAP-1575	7¾	AAC-1575	11	AALB-1575	15½	AASB-1575	11½
		1"	.....		AAC-15100	11	AALB-15100	15½	.....	
200 or 300* Watt	With Guard	½"	AAP-2050G	12¾	AAC-2050G	16	AALB-2050G	20½	AASB-2050G	16½
		¾"	AAP-2075G	12¾	AAC-2075G	16	AALB-2075G	20½	AASB-2075G	16½
		1"	.....		AAC-2100G	16	AALB-2100G	20½	.....	
	Less Guard	½"	AAP-2050	12	AAC-2050	15¼	AALB-2050	19¾	AASB-2050	15¾
		¾"	AAP-2075	12	AAC-2075	15¼	AALB-2075	19¾	AASB-2075	15¾
		1"	.....		AAC-2100	15¼	AALB-2100	19¾	.....	
300/ 500 Watt	With Guard	½"	AAP-5050G	19½	AAC-5050G	22¾	AALB-5050G	27¼	.....	
		¾"	AAP-5075G	19½	AAC-5075G	22¾	AALB-5075G	27¼	.....	
		1"	.....		AAC-5100G	22¾	AALB-5100G	27¼	.....	
	Less Guard	½"	AAP-5050	18⅛	AAC-5050	21⅜	AALB-5050	25⅞	.....	
		¾"	AAP-5075	18⅛	AAC-5075	21⅜	AALB-5075	25⅞	.....	
		1"	.....		AAC-5100	21⅜	AALB-5100	25⅞	.....	

Finish: Malleable Iron, Cadmium Finish on Ceiling Unilets and Brackets: Aluminum, Satin Finish on Canopy, Globe Holder and Guard. Hood is steel.

Types "AAC" and "AALB" have an Explosion-proof Junction Fitting with four threaded hubs for ½" or ¾" conduit, three of which have close-up plugs.

*Takes 300 Watt Type PS-30 Medium Base Lamp, and any of the four reflector styles may be used with full Underwriters' approval for Class I, Groups C and D Hazardous Locations

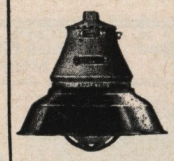
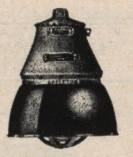
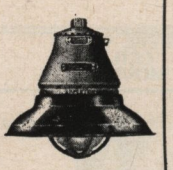
200 watt types "AALB" and "AASB" Fixtures take deep bowl and 30° angle reflectors only.

Ruby globes can be supplied for fixtures listed above.

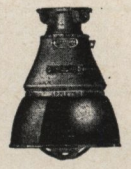
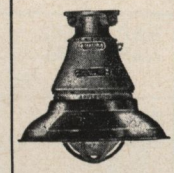
"AA-51" SERIES APPLETON VENTED TYPE EXPLOSION-PROOF LIGHTING FIXTURES

Listed by Underwriters' Laboratories for Class I, Groups C and D, Hazardous Locations

TYPE "AAP" WITH REFLECTOR

DESCRIPTION			WITH STANDARD DOME REFLECTOR		WITH DEEP BOWL REFLECTOR		WITH SHALLOW DOME REFLECTOR		WITH 30° ANGLE REFLECTOR	
										
Lamp Size	Style	Hub Size	Cat. No.	Wt. Lbs. Each	Cat. No.	Wt. Lbs. Each	Cat. No.	Wt. Lbs. Each	Cat. No.	Wt. Lbs. Each
60 to 100 Watt	With Guard	½" ¾"	AAP-1050STG AAP-1075STG	10 10	AAP-1050DBG AAP-1075DBG	9¾ 9¾	AAP-1050SHG AAP-1075SHG	9½ 9½	AAP-1050ANG AAP-1075ANG	9¾ 9¾
	Less Guard	½" ¾"	AAP-1050ST AAP-1075ST	9½ 9½	AAP-1050DB AAP-1075DB	9¼ 9¼	AAP-1050SH AAP-1075SH	9 9	AAP-1050AN AAP-1075AN	9¼ 9¼
150 Watt	With Guard	½" ¾"	AAP-1550STG AAP-1575STG	10⅜ 10⅜	AAP-1550DBG AAP-1575DBG	9¾ 9¾	AAP-1550SHG AAP-1575SHG	9¾ 9¾	AAP-1550ANG AAP-1575ANG	9¾ 9¾
	Less Guard	½" ¾"	AAP-1550ST AAP-1575ST	9⅞ 9⅞	AAP-1550DB AAP-1575DB	9¼ 9¼	AAP-1550SH AAP-1575SH	9¼ 9¼	AAP-1550AN AAP-1575AN	9¼ 9¼
200 or 300* Watt	With Guard	½" ¾"	AAP-2050STG AAP-2075STG	15¼ 15¼	AAP-2050DBG AAP-2075DBG	14⅞ 14⅞	AAP-2050SHG AAP-2075SHG	14½ 14½	AAP-2050ANG AAP-2075ANG	14⅞ 14⅞
	Less Guard	½" ¾"	AAP-2050ST AAP-2075ST	14½ 14½	AAP-2050DB AAP-2075DB	14⅛ 14⅛	AAP-2050SH AAP-2075SH	13¾ 13¾	AAP-2050AN AAP-2075AN	14 14
300/ 500 Watt	With Guard	½" ¾"	AAP-5050STG AAP-5075STG	24 24	AAP-5050DBG AAP-5075DBG	23½ 23½	AAP-5050SHG AAP-5075SHG	22½ 22½	AAP-5050ANG AAP-5075ANG	23½ 23½
	Less Guard	½" ¾"	AAP-5050ST AAP-5075ST	22⅝ 22⅝	AAP-5050DB AAP-5075DB	22⅛ 22⅛	AAP-5050SH AAP-5075SH	21⅛ 21⅛	AAP-5050AN AAP-5075AN	22⅛ 22⅛

TYPE "AAC" WITH REFLECTOR

DESCRIPTION			WITH STANDARD DOME REFLECTOR		WITH DEEP BOWL REFLECTOR		WITH SHALLOW DOME REFLECTOR		WITH 30° ANGLE REFLECTOR	
										
Lamp Size	Style	Hub Size	Cat. No.	Wt. Lbs. Each	Cat. No.	Wt. Lbs. Each	Cat. No.	Wt. Lbs. Each	Cat. No.	Wt. Lbs. Each
60 to 100 Watt	With Guard	½" ¾" 1"	AAC-1050STG AAC-1075STG AAC-1100STG	13¼ 13¼ 13¼	AAC-1050DBG AAC-1075DBG AAC-1100DBG	13 13 13	AAC-1050SHG AAC-1075SHG AAC-1100SHG	12¾ 12¾ 12¾	AAC-1050ANG AAC-1075ANG AAC-1100ANG	13 13 13
	Less Guard	½" ¾" 1"	AAC-1050ST AAC-1075ST AAC-1100ST	12¾ 12¾ 12¾	AAC-1050DB AAC-1075DB AAC-1100DB	12½ 12½ 12½	AAC-1050SH AAC-1075SH AAC-1100SH	12¼ 12¼ 12¼	AAC-1050AN AAC-1075AN AAC-1100AN	12½ 12½ 12½
150 Watt	With Guard	½" ¾" 1"	AAC-1550STG AAC-1575STG AAC-15100STG	13⅝ 13⅝ 13⅝	AAC-1550DBG AAC-1575DBG AAC-15100DBG	13 13 13	AAC-1550SHG AAC-1575SHG AAC-15100SHG	13 13 13	AAC-1550ANG AAC-1575ANG AAC-15100ANG	13 13 13
	Less Guard	½" ¾" 1"	AAC-1550ST AAC-1575ST AAC-15100ST	13⅛ 13⅛ 13⅛	AAC-1550DB AAC-1575DB AAC-15100DB	12½ 12½ 12½	AAC-1550SH AAC-1575SH AAC-15100SH	12½ 12½ 12½	AAC-1550AN AAC-1575AN AAC-15100AN	12½ 12½ 12½
200 or 300* Watt	With Guard	½" ¾" 1"	AAC-2050STG AAC-2075STG AAC-2100STG	18½ 18½ 18½	AAC-2050DBG AAC-2075DBG AAC-2100DBG	18⅛ 18⅛ 18⅛	AAC-2050SHG AAC-2075SHG AAC-2100SHG	17¾ 17¾ 17¾	AAC-2050ANG AAC-2075ANG AAC-2100ANG	18⅛ 18⅛ 18⅛
	Less Guard	½" ¾" 1"	AAC-2050ST AAC-2075ST AAC-2100ST	17¾ 17¾ 17¾	AAC-2050DB AAC-2075DB AAC-2100DB	17⅜ 17⅜ 17⅜	AAC-2050SH AAC-2075SH AAC-2100SH	17 17 17	AAC-2050AN AAC-2075AN AAC-2100AN	17¼ 17¼ 17¼
300/ 500 Watt	With Guard	½" ¾" 1"	AAC-5050STG AAC-5075STG AAC-5100STG	27¼ 27¼ 27¼	AAC-5050DBG AAC-5075DBG AAC-5100DBG	26¾ 26¾ 26¾	AAC-5050SHG AAC-5075SHG AAC-5100SHG	25¾ 25¾ 25¼	AAC-5050ANG AAC-5075ANG AAC-5100ANG	26¾ 26¾ 26¾
	Less Guard	½" ¾" 1"	AAC-5050ST AAC-5075ST AAC-5100ST	25⅞ 25⅞ 25⅞	AAC-5050DB AAC-5075DB AAC-5100DB	25⅜ 25⅜ 25⅜	AAC-5050SH AAC-5075SH AAC-5100SH	24⅜ 24⅜ 24⅜	AAC-5050AN AAC-5075AN AAC-5100AN	25⅜ 25⅜ 25⅜

Reflectors are Porcelain Enameled Steel, Green Outside and White Inside.

Type "ACC" Fixtures have an Explosion-proof Junction Fitting with four threaded hubs for ½" or ¾" conduit, three of which have close-up plugs.

* Takes 300 Watt Type PS-30 Medium Base Lamp, and any of the four reflector styles may be used with full Underwriters' approval for Class I, Groups C and D Hazardous Locations.

Ruby globes can be supplied for fixtures listed above.

APPLETON REFLECTORS
FOR "AA-51" SERIES VENTED TYPE EXPLOSION-PROOF LIGHTING FIXTURES

	REFLECTORS†			
				
Lamp Size	**Standard Dome**	**Bowl**	**Shallow Dome**	**30° Angle**
60 to 100 Watt	12″ Diam. Cat. No. **AARE-1ST** Wt. Lbs. Each 1¾	10″ Diam. Cat. No. **AARE-1DB** Wt. Lbs. Each 1½	12″ Diam. Cat. No. **AARE-1SH** Wt. Lbs. Each 1¼	10″ Diam. Cat. No. **AARE-1AN** Wt. Lbs. Each 1½
150 Watt	14″ Diam. Cat. No. **AARE-15ST** Wt. Lbs. Each 2⅛	10″ Diam. Cat. No. **AARE-15DB** Wt. Lbs. Each 1½	14″ Diam. Cat. No. **AARE-15SH** Wt. Lbs. Each 1½	10″ Diam. Cat. No. **AARE-15AN** Wt. Lbs. Each 1½
200 or 300* Watt	16″ Diam. Cat. No. **AARE-2ST** Wt. Lbs. Each 2½	12″ Diam. Cat. No. **AARE-2DB** Wt. Lbs. Each 2⅛	16″ Diam. Cat. No. **AARE-2SH** Wt. Lbs. Each 1¾	12″ Diam. Cat. No. **AARE-2AN** Wt. Lbs. Each 2
300/500 Watt	20″ Diam. Cat. No. **AARE-5ST** Wt. Lbs. Each 4½	18″ Diam. Cat. No. **AARE-5DB** Wt. Lbs. Each 4	18″ Diam. Cat. No. **AARE-5SH** Wt. Lbs. Each 3	18″ Diam. Cat. No. **AARE-5AN** Wt. Lbs. Each 4
	High Bay††			
300/500 Watt	18″ Diam. Cat. No. **AARE-5HB** Wt. Lbs. Each 3½			

AAHD-1 DETACHABLE CARRYING HANDLE

This handy, inexpensive accessory snaps easily into holes provided in the release lugs at the top of each Dome Unit, and fits all sizes of "AA-51" Series Fixtures. Affords a safe and convenient grip for carrying fixtures up ladder, both at time of original installation and during maintenance.

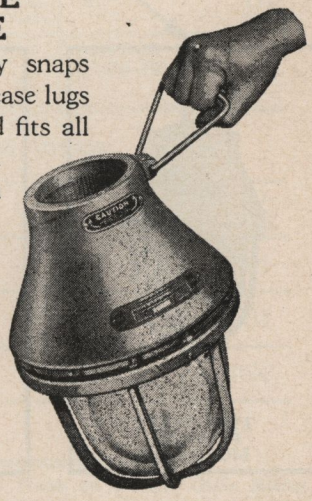
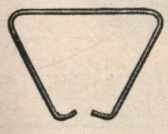
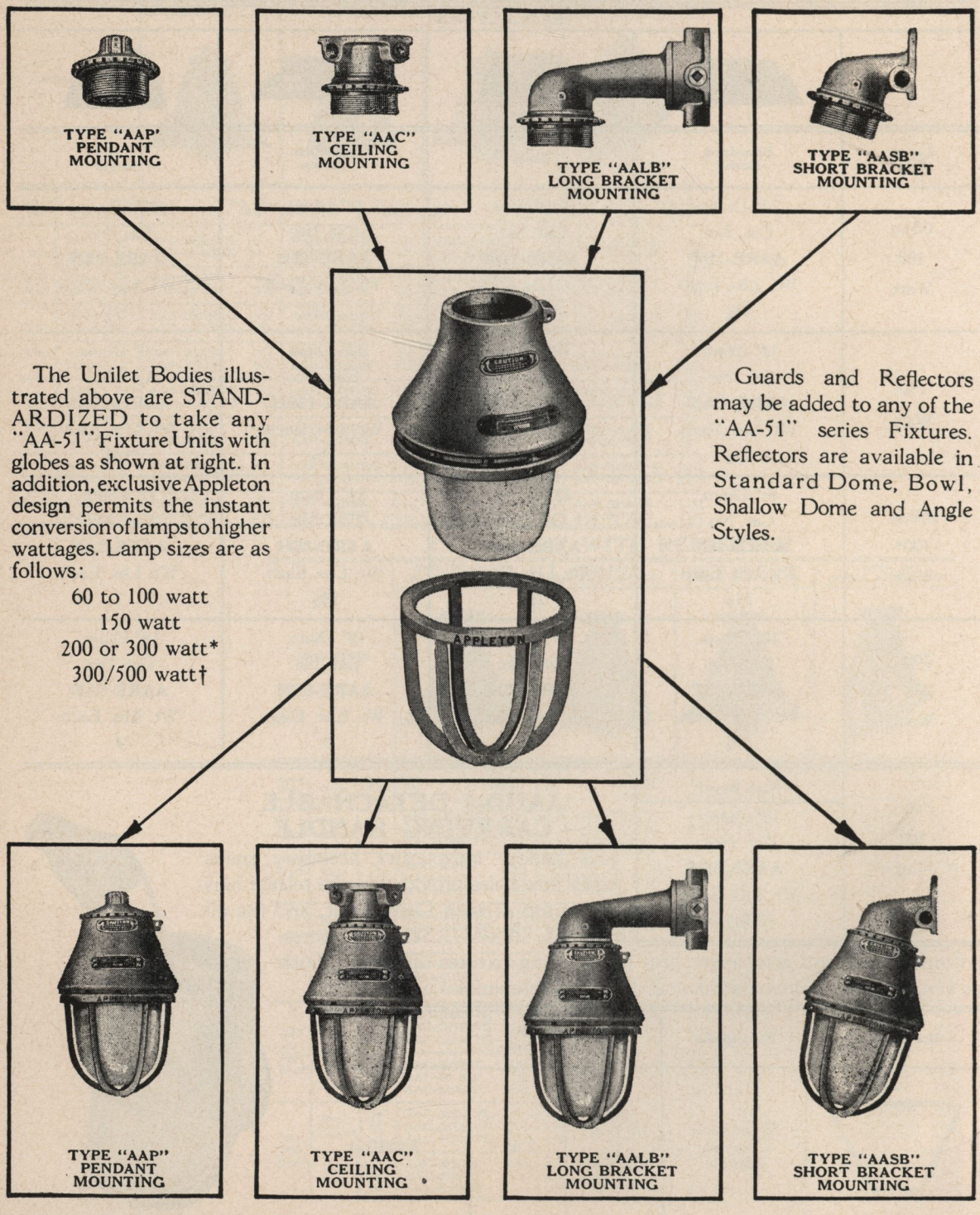


Illustration	Description	Lamp Size	Wt. Each	Cat. No.
	Detachable Carrying Handle	All-60 Watt to 500 Watt Inclusive	2 oz.	**AAHD-1**

†All Reflectors except High Bay are Porcelain Enameled Steel, Green Outside and White Inside.
††High Bay reflector is etched Alzak aluminum.
*Only when 300 Watt Type PS-30 medium base lamp is used.

"AA-51" SERIES APPLETON VENTED TYPE EXPLOSION-PROOF LIGHTING FIXTURES

Listed by Underwriters' Laboratories for Class I, Groups C and D, Hazardous Locations



The Unilet Bodies illustrated above are STANDARDIZED to take any "AA-51" Fixture Units with globes as shown at right. In addition, exclusive Appleton design permits the instant conversion of lamps to higher wattages. Lamp sizes are as follows:

60 to 100 watt
150 watt
200 or 300 watt*
300/500 watt†

Guards and Reflectors may be added to any of the "AA-51" series Fixtures. Reflectors are available in Standard Dome, Bowl, Shallow Dome and Angle Styles.

*Takes 300 Watt Type PS-30 Medium Base Lamp, and any of four reflector styles. May be used with full Underwriters' approval for Class I, Groups C and D, Hazardous Locations.

†300/500 Watt cannot be used on type "AASB" short mounting bracket.

ACCESSORIES AND STAND-BY UNITS
"AA-51" SERIES VENTED TYPE EXPLOSION-PROOF LIGHTING FIXTURES



Globes	Lamp Size	Color Globe	Catalog Number	Wt. Lbs. Each
	60 to 200** Watt	CLEAR GREEN RED AMBER YELLOW RUBY	AAGL-1 AAGL-1G AAGL-1R AAGL-1A AAGL-1Y AAGL-1RU	1⅛
	200 or 300* Watt	CLEAR GREEN RED AMBER YELLOW RUBY	AAGL-2 AAGL-2G AAGL-2R AAGL-2A AAGL-2Y AAGL-2RU	3⅜
	300/500 Watt	CLEAR	AAGL-5	5¾



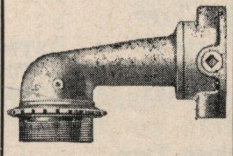
Guards	Lamp Size	Catalog Number	Wt. Lbs. Each
	60 to 200** Watt	AAGU-1	½
	200 or 300* Watt	AAGU-2	¾
	300/500 Watt	AAGU-5	1⅜

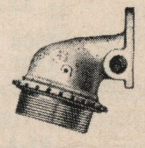
*Only when 300 watt Type PS-30 medium base lamp is used.
**Only when 200 watt type A25 medium base lamp is used.

UNILET BODY WITH CONTACTS AND FIXTURE ADAPTER UNIT

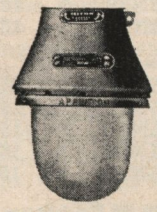








DESCRIPTION		TYPE "AAP" PENDANT MOUNTING		TYPE "AAC" CEILING MOUNTING		TYPE "AALB" LONG BRACKET MOUNTING		TYPE "AASB" SHORT BRACKET MOUNTING	
Lamp Size	Hub Size	Cat. No.	Wt. Lbs. Each	Cat. No.	Wt. Lbs. Each	Cat. No.	Wt. Lbs. Each	Cat. No.	Wt. Lbs. Each
60–500 Watt	½ ¾ 1	AAP-50 AAP-75	1 1	AAC-50 AAC-75 AAC-100	4½ 4½ 5	AALB-50 AALB-75 AALB-100	9 9 10	AASB-50 AASB-75	4½ 4½ .....



FIXTURE UNIT WITH GLOBE—LESS GUARD

LAMP SIZE	Cat. No.	Wt. Lbs. Each
60 to 100 Watt	AAU-1	6½
150 Watt	AAU-15	6½
200 or 300 Watt*	AAU-2	10½
300/500 Watt	AAU-5	17

Finish: Malleable Iron, Cadmium Finish on Ceiling Unilets and Brackets: Aluminum, Satin Finish on Canopy, Globe Holder and Guard. Hood in steel.

Types "AAC" and "AALB" have an Explosion-proof Junction Fitting with four threaded hubs for ½", ¾" or 1" conduit, three of which have close-up plugs.

* Takes 300 Watt Type PS-30 Medium Base Lamp, and any of the four reflector styles may be used with full Underwriters' approval for Class I, Groups C and D Hazardous Locations.

200 watt types "AALB" and "AASB" Fixtures take deep bowl and 30° angle reflectors only.

APPLETON ELECTRIC COMPANY

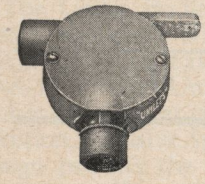
AL SERIES FLEXIBLE FIXTURE HANGER UNILETS

FOR PENDENT FIXTURES

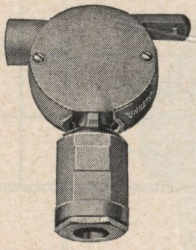
With Threaded Stem to Take ½-inch or ¾-inch Rigid Conduit

The AL Series of Threaded Fixture Hanger Unilets have been designed in two styles: ball and cushion, so as to provide a flexible suspension for electric fixtures. The suspension is from a Universal Joint which permits the Fixture to swivel to an angle of 20 degrees in any direction from the perpendicular and assures the fixture hanging plumb at all times. This also prevents breaking of fixture stem at point of suspension, which may be caused by unusual strains, accidental or otherwise.

TYPE ALA FLEXIBLE FIXTURE HANGERS



Type ALA Ball



Type ALA Cushion

Size — Fix. Stem	Size — Conduit	Std. Pkg.	THREADED Heavy-Wall Cat. No.		NO THREAD Heavy-Wall Cat. No.		NO THREAD Thin-Wall Cat. No.	
				List Each		List Each		List Each
ALA Ball Type								
½	½	25	1300	*	13N00	*	13T00	*
½	¾	25	1301	*	13N01	*	13T01	*
¾	¾	25	1302	*	13N02	*	13T02	*
ALA Cushion Type								
Weight Fixture 3 to 6 Pounds								
½	½	25	1305	*	13N05	*	13T05	*
½	¾	25	1306	*	13N06	*	13T06	*
¾	¾	25	1307	*	13N07	*	13T07	*
Weight Fixture 6 to 12 Pounds								
½	½	25	1310	*	13N10	*	13T10	*
½	¾	25	1311	*	13N11	*	13T11	*
¾	¾	25	1312	*	13N12	*	13T12	*
Weight Fixture 12 to 24 Pounds								
½	½	25	1315	*	13N15	*	13T15	*
½	¾	25	1316	*	13N16	*	13T16	*
¾	¾	25	1317	*	13N17	*	13T17	*
Weight Fixture 24 to 48 Pounds								
½	½	25	1560	*	16N60	*	13T60	*
½	¾	25	1561	*	15N61	*	13T61	*
¾	¾	25	1562	*	15N62	*	13T62	*
Weight Fixture 48 to 64 Pounds								
½	½	25	1565	*	15N65	*	15T65	*
½	¾	25	1566	*	15N66	*	15T66	*
¾	¾	25	1567	*	15N67	*	15T67	*

Cadmium finish is the standard finish.

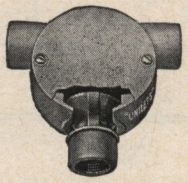
*See Price List

AL SERIES FLEXIBLE FIXTURE HANGER UNILETS

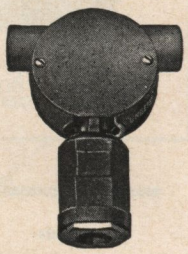
FOR PENDENT FIXTURES

With Threaded Stem to Take ½-inch or ¾-inch Rigid Conduit

TYPE ALC FLEXIBLE FIXTURE HANGERS



Type ALC Ball



Type ALC Cushion

Size — Fix. Stem	Size — Conduit	Std. Pkg.	Heavy-Wall THREADED Cat. No.		Heavy-Wall NO THREAD Cat. No.		Thin-Wall NO THREAD Cat. No.	
				List Each		List Each		List Each
ALC Ball Type								
½	½	25	1320	*	13N20	*	13T20	*
½	¾	25	1321	*	13N21	*	13T21	*
½	1	10	1322	*	13N22	*	13T22	*
¾	¾	25	1323	*	13N23	*	13T23	*
¾	1	10	1324	*	13N24	*	13T24	*
ALC Cushion Type								
Weight Fixture 3 to 6 Pounds								
½	½	25	1325	*	13N25	*	13T25	*
½	¾	25	1326	*	13N26	*	13T26	*
½	1	10	1327	*	13N27	*	13T27	*
¾	¾	25	1328	*	13N28	*	13T28	*
¾	1	10	1329	*	13N29	*	13T29	*
Weight Fixture 6 to 12 Pounds								
½	½	25	1330	*	13N30	*	13T30	*
½	¾	25	1331	*	13N31	*	13T31	*
½	1	10	1332	*	13N32	*	13T32	*
¾	¾	25	1333	*	13N33	*	13T33	*
¾	1	10	1334	*	13N34	*	13T34	*
Weight Fixture 12 to 24 Pounds								
½	½	25	1335	*	13N35	*	13T35	*
½	¾	25	1336	*	13N36	*	13T36	*
½	1	10	1337	*	13N37	*	13T37	*
¾	¾	25	1338	*	13N38	*	13T38	*
¾	1	10	1339	*	13N39	*	13T39	*
Weight Fixture 24 to 48 Pounds								
½	½	25	1570	*	15N70	*	15T70	*
½	¾	25	1571	*	15N71	*	15T71	*
½	1	10	1572	*	15N72	*	15T72	*
¾	¾	25	1573	*	15N73	*	15T73	*
¾	1	10	1574	*	15N74	*	15T74	*
Weight Fixture 48 to 64 Pounds								
½	½	25	1575	*	15N75	*	15T75	*
½	¾	25	1576	*	15N76	*	15T76	*
½	1	10	1577	*	15N77	*	15T77	*
¾	¾	25	1578	*	15N78	*	15T78	*
¾	1	10	1579	*	15N79	*	15T79	*

Cadmium finish is the standard finish.

*See Price List

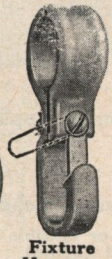
APPLETON ELECTRIC COMPANY

ACCESSORIES

CONDUIT CLAMPS AND FIXTURE HANGERS

For Use with Types "GWC", "GWCR", "GWH", "GWHR" and "ALH" Unilets having Guy Wire Fixture Hanger and Rod Support


Conduit Clamps


Fixture Hangers

Conduit Clamps

Cat. No. For Rigid Conduit	Cat. No. For EMT (Thin-Wall)	Size In.	Std. Pkg.	Price Each
17215	172T15	½	40	*
17216	172T16	¾	35	*
17217	172T17	1	30	*

Fixture Hangers

17225	172T25	½	40	*
17226	172T26	¾	35	*
17227	172T27	1	30	*

PENDENT FIXTURE HOOKS*


Female Hub


Male Hub

Female Hub For Rigid Conduit (Heavy-Wall) Size In.	Std. Pkg.	Cat. No.	Price Each	Male Hub Cat. No.	Price Each
½	50	1480	*	1470	*
¾	25	1481	*	1471	*

PENDENT FIXTURE LOOPS*

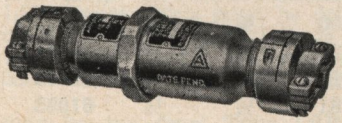

Female Hub


Male Hub

Female Hub For Rigid Conduit (Heavy-Wall) Size In.	Std. Pkg.	Cat. No.	Price Each	Male Hub Cat. No.	Price Each
½	50	1485	*	1495	*
¾	25	1486	*	1496	*

*Pendent Fixtures Hooks and Loops have a hole in side for wire leading to plug and receptacle. Cadmium finish is the Standard Finish.

APPLETON EXTENSION FLEXIBLE CABLE CONNECTORS, TYPE BRC



Where portable apparatus taking large current is used, the portable cable becomes large and very difficult to handle. This difficulty may be overcome by making up the cable in several suitable lengths, using the Type "BRC" Connector and a plug at the other end.

As each cable requires both a plug and a receptacle, the connectors are listed complete.

Furnished with gland nuts, rubber bushings and cord grips with cast aluminum handle.

20 Amp., 125 V. D.C.—30 Amp., 230 V. A.C.

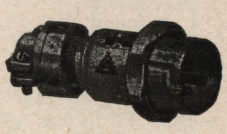
Cat. No.	Poles	Diam. Cable	Std. Pkg.	Pkg. Wt.	Price Each
9751	2	.500 to .625	10	33	*
9752	2	.625 to .750	10	33	*
9755	3	.500 to .625	10	35	*
9756	3	.625 to .750	10	35	*
9761	4	.500 to .625	10	37	*
9762	4	.625 to .750	10	37	*

*See Price List

TYPE BP PLUGS

For Use with Types BRD, BRG, and BRY Plug Receptacle Housings


Style 1


Style 2

FOR FLEXIBLE CABLE

Furnished with gland nut, rubber bushing and cord grip with cast aluminum handle.

20 Amp., 125 V. D.C.—30 Amp., 230 V. A.C.

Cat. No.	Poles	Diam. Cable	Std. Pkg.	Pkg. Wt.	Price Each
		Style 1—Without Clamping Nut			
9701	2	.500 to .625	25	15	*
9702	2	.625 to .750	25	15	*
9703	2	.750 to .875	25	15	*
9705	3	.500 to .625	25	16	*
9706	3	.625 to .750	25	16	*
9707	3	.750 to .875	25	16	*
9708	3	.875 to 1.000	25	16	*
9710	4	.500 to .625	25	17	*
9711	4	.625 to .750	25	17	*
9712	4	.750 to .875	25	17	*
9713	4	.875 to 1.000	25	17	*
		Style 2—With Clamping Nut (Watertight)			
9721	2	.500 to .625	25	18	*
9722	2	.625 to .750	25	18	*
9723	2	.750 to .875	25	18	*
9725	3	.500 to .625	25	19	*
9726	3	.625 to .750	25	19	*
9727	3	.750 to .875	25	19	*
9728	3	.875 to 1.000	25	19	*
9730	4	.500 to .625	25	20	*
9731	4	.625 to .750	25	20	*
9732	4	.750 to .875	25	20	*
9733	4	.875 to 1.000	25	20	*

FOR FLEXIBLE CONDUCTOR, FLEXIBLE CONDUIT, OR ARMORED CONDUCTOR


Style 1


Style 2

Furnished with cord grip. With cast aluminum handles (non-watertight).

20 Amp., 125 V. D.C.—30 Amp., 230 V. A.C.

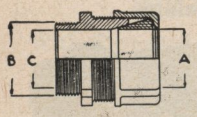
Cat. No.	Poles	Diam. Cable	Std. Pkg.	Pkg. Wt.	Price Each
		Style 1—Without Clamping Nut			
9820	2	.500 to .875	25	..	*
9821	2	.875 to 1.125	25	..	*
9825	3	.500 to .875	25	..	*
9826	3	.875 to 1.125	25	..	*
9830	4	.500 to .875	25	..	*
9831	4	.875 to 1.125	25	..	*
		Style 2—With Clamping Nut			
9835	2	.500 to .875	25	..	*
9836	2	.875 to 1.125	25	..	*
9840	3	.500 to .875	25	..	*
9841	3	.875 to 1.125	25	..	*
9845	4	.500 to .875	25	..	*
9846	4	.875 to 1.125	25	..	*

*See Price List

APPLETON ELECTRIC COMPANY

CG SERIES CONNECTORS

TYPE "CGB" — STRAIGHT — MALE THREAD



A — Inside diameter in inches of rubber bushing or lead sleeve which takes round flexible cord or cable, armored cable, or flexible conduit.

B — Size in inches of Unilet hub with which connectors can be used.

C — Inside diameter of hole through nipple of connectors.

With Tapered Rubber Bushing — Schedule 1

For Connecting Round Flexible Cord or Cable to Unilets, Plugs, or Rigid Conduit

Cord or Cable will Pass Entirely Through the Connector

Dimensions, Inches A	B	C	Cat. No.	Std. Pkg.	List Each
	⅜	15/32	61000	50	*
.125 to .250	½	17/32	61001	50	*
	¾	25/32	61002	50	*
	⅜	15/32	61003	50	*
.250 to .375	½	17/32	61004	50	*
	¾	25/32	61005	50	*
.375 to .500	⅜	15/32	61006	50	*
.375 to .500	½	17/32	61007	50	*
	¾	25/32	61008	50	*
.500 to .625	¾	11/16	61009	50	*
	1	15/16	61010	50	*
.625 to .750	1	15/16	61011	50	*
.750 to .875	1	15/16	61012	25	*
.875 to 1.000	1¼	1 7/32	61015	25	*
	1½	1 7/16	61016	25	*
1.000 to 1.188	1¼	1 7/32	61017	25	*
	1½	1 7/16	61018	25	*
1.188 to 1.375	1½	1 7/16	61019	25	*
1.375 to 1.625	2	1 13/16	61020	25	*
	2½	2 5/16	61021	25	*
1.625 to 1.875	2	1 13/16	61022	10	*
	2½	2 5/16	61023	10	*
1.875 to 2.188	2½	2 5/16	61024	10	*
	3	2 7/8	61025	10	*
2.188 to 2.250	2½	2 5/16	61026	10	*
2.188 to 2.500	3	2 7/8	61027	10	*

With Tapered Rubber Bushing — Schedule 2

For Connecting Round Flexible Cord or Cable to Unilets or Rigid Conduit but not to Plugs

Cord or Cable will not Pass Through the Connector Without Removing Outer Covering

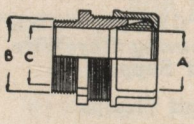
.438 to .500	⅜	15/32	61030	50	*
.500 to .625	½	½	61031	50	*
.625 to .750	½	½	61032	50	*
	¾	11/16	61033	50	*
.750 to .875	½	½	61034	25	*
	¾	11/16	61035	25	*
.875 to 1.000	¾	11/16	61036	25	*
	1	29/32	61037	25	*
1.000 to 1.188	¾	11/16	61038	25	*
	1	29/32	61039	25	*
	¾	11/16	61045	25	*
1.188 to 1.375	1	29/32	61046	25	*
	1¼	1 7/32	61047	25	*
1.375 to 1.625	1¼	1 7/32	61048	25	*
	1½	1 7/16	61049	25	*
1.625 to 1.875	1¼	1 7/32	61050	10	*
	1½	1 7/16	61051	10	*
1.875 to 2.188	2	1 7/8	61052	10	*
2.188 to 2.500	2	1 7/8	61053	10	*
2.250 to 2.500	2½	2 5/16	61054	10	*

Cadmium Finish is the Standard Finish.

***See Price List**

CG SERIES CONNECTORS

TYPE "CGB" — STRAIGHT — MALE THREAD



A — Inside diameter in inches of rubber bushing or lead sleeve which takes round flexible cord or cable, armored cable, or flexible conduit.

B — Size in inches of Unilet hub with which connectors can be used.

C — Inside diameter of hole through nipple of connectors.

With Tapered Split Lead Sleeve — Schedule 3

For Connecting Armored Conductor or Flexible Conduit to Unilets, Plugs, or Rigid Conduit

Armored Conductor or Flexible Conduit will Pass Entirely Through the Connector

Dimensions, Inches A	B	C	Cat. No.	Std. Pkg.	List Each
.375 to .500	⅜	15/32	61060	50	*
.375 to .500	½	17/32	61061	50	*
	¾	25/32	61062	50	*
.500 to .625	½	17/32	61063	50	*
.500 to .625	¾	25/32	61064	50	*
.625 to .781	1	15/16	61065	50	*
.781 to .938	1	15/16	61066	25	*
.938 to 1.156	1¼	1 7/32	61070	25	*
	1½	1 7/16	61071	25	*
1.156 to 1.375	1½	1 7/16	61072	25	*
1.375 to 1.656	2	1 13/16	61073	25	*
	2½	2 5/16	61074	25	*
1.656 to 1.938	2	1 13/16	61075	10	*
	2½	2 5/16	61076	10	*
1.938 to 2.281	2½	2 5/16	61077	10	*
	3	2 7/8	61078	10	*
2.281 to 2.625	3	2 7/8	61079	10	*

With Tapered Split Lead Sleeve — Schedule 4

For Connecting Flexible Conduit to Unilets, Plugs, or Rigid Conduit

Flexible Conduit will not Pass Through the Connector

.438 to .500	⅜	15/32	61080	50	*
.500 to .625	⅜	15/32	61081	50	*
.563 to .625	½	17/32	61082	50	*
.625 to .781	½	½	61083	50	*
	¾	11/16	61084	50	*
.781 to .938	½	½	61085	25	*
	¾	11/16	61086	25	*
.938 to 1.156	¾	11/16	61087	25	*
	1	29/32	61088	25	*
	¾	11/16	61090	25	*
1.156 to 1.375	1	29/32	61091	25	*
	1¼	1 7/32	61092	25	*
1.375 to 1.656	1¼	1 7/32	61093	25	*
	1½	1 7/16	61094	25	*
1.656 to 1.938	1¼	1 7/32	61095	10	*
	1½	1 7/16	61096	10	*
1.938 to 2.281	2	1 7/8	61097	10	*
2.281 to 2.625	2	1 7/8	61098	10	*
	2½	2 5/16	61099	10	*

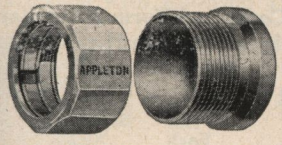
Cadmium Finish is the Standard Finish.

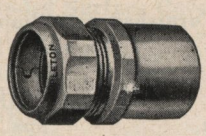
***See Price List**

APPLETON ELECTRIC COMPANY

NO-THREAD UNILET REDUCERS

For Use With Rigid Conduit (Heavy-Wall) and Threadless Thin-Wall Conduit



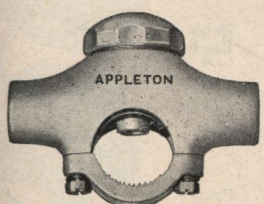


—For Rigid Conduit— (Heavy-Wall) Cat. No.	Wt.Lbs. Std.Pkg.	Price Each	Size	Std. Pkg.	—For Threadless— Thin Wall Conduit Cat. No.	Wt.Lbs. Std.Pkg.	Price Each
82N01	8	*	¾- ½	50	82T01	6	*
82N02	13	*	1 - ½	50	82T02	10	*
82N13	13	*	1 - ¾	50	82T13	10	*
82N03	10	*	1¼- ½	25	82T03	8	*
82N14	10	*	1¼- ¾	25	82T14	8	*
82N24	11	*	1¼-1	25	82T24	9	*
82N04	6	*	1½- ½	10	82T04	5	*
82N15	6	*	1½- ¾	10	82T15	5	*
82N25	6	*	1½-1	10	82T25	5	*
82N34	6	*	1½-1¼	10	82T34	5	*
82N05	2	*	2 - ½	5	82T05	5	*
82N16	2	*	2 - ¾	5	82T16	2	*
82N26	3	*	2 -1	5	82T26	2	*
82N35	4	*	2 -1¼	5	82T35	4	*
82N43	5	*	2 -1½	5	82T43	5	*

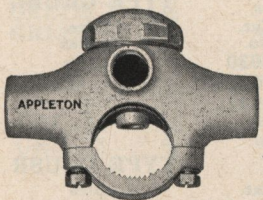
TYPE LSF UNILETS

FOR USE ON FILLING STATION SIGNS

For Fastening to Sign Pipe and to Serve as Outlet for Leading to Reflectors



Type LSF—Regular



Type LSF—With Side Hub

The Type LSF Unilet (Regular) has been designed expressly for use in connection with gasoline and service station signs.. The cross-arm on which sign is hung serves as conduit for wires leading to LSF Unilet. Hole must be drilled in top of cross-arm pipe to take small hub in bottom of LSF Unilet. Gasket around hub sets over cross-arm pipe and insures perfect fit when strap is drawn up.

Conduit may be run from Type LSF Unilet to both reflectors and final splicing of wires completed inside the fitting after which the cover is screwed onto the fitting making the entire installation weather-proof. Type LSF Unilet is also made with a ½-inch hub on one side to accommodate connector for armored cable.

Type LSF—Regular

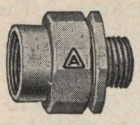
Size Sign Pipe	Std. Pkg.	—½-inch End Hubs— Cat. No.	Std. Pkg.	Price Each	—¾-inch End Hubs— Cat. No.	Std. Pkg.	Price Each
1	10	LSF-13	20	*	LSF-23	19	*
1¼	10	LSF-14	21	*	LSF-24	20	*
1½	10	LSF-15	22	*	LSF-25	21	*
2	10	LSF-16	23	*	LSF-26	22	*
Type LSF—With One ½-inch Hub on Side							
1	10	LSF-113	21	*	LSF-213	20	*
1¼	10	LSF-114	22	*	LSF-214	21	*
1½	10	LSF-115	23	*	LSF-215	22	*
2	10	LSF-116	24	*	LSF-216	23	*

*See Price List

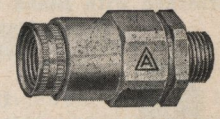
UNION CONNECTORS

EXPLOSION-PROOF AND DUST-TIGHT TYPE UNY—SHORT AND LONG—MALE

For Connecting Conduit to Unilet



Short Type



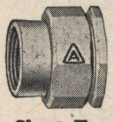
Patent No. 2,106,444 Long Type

Type UNY-S SHORT—Male Style

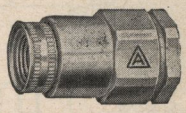
Cat. No.	Size	—Dimensions— Length	Diam.	Std. Pkg.	Price Each
UNY84	½	2⅛	1⅞	50	*
UNY85-R	¾–½*	2⅛	1⅞	50	*
UNY85	¾	2⅛	1⅞	50	*
UNY90	2½	4⅞	4⅞	10	*
UNY91	3	5	5 7/16	5	*
UNY92	3½	5⅛	5 11/16	5	*
UNY93	4	5¼	6 7/16	5	*
Type UNY-L Long — Male Style					
UNY76	1	3 5/16	1⅞	25	*
UNY77	1¼	3⅞	2 5/16	25	*
UNY78	1½	4	2 11/16	25	*
UNY79	2	4 1/16	3⅛	10	*

TYPE UNF—SHORT AND LONG—FEMALE

For Connecting Conduit to Conduit



Short Type



Patent No. 2,106,44 Long Type

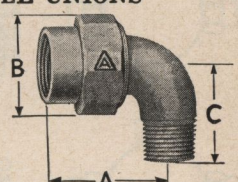
Type UNF-S Short — Female Style

Cat. No.	Size	—Dimensions— Length	Diam.	Std. Pkg.	Price Each
UNF84	½	1 11/16	1⅞	50	*
UNF85-R	¾–½†	1 11/16	1⅞	50	*
UNF85	¾	1 11/16	1⅞	50	*
UNF90	2½	3½	4⅞	10	*
UNF91	3	3½	5 7/16	5	*
UNF92	3½	3½	5 11/16	5	*
UNF93	4	3½	6 7/16	5	*
Type UNF-L Long — Female Style					
UNF76	1	2⅞	1⅞	25	*
UNF77	1¼	3	2 5/16	25	*
UNF78	1½	3⅛	2 11/16	25	*
UNF79	2	3⅜	3⅛	10	*

TYPE UNL 90° ANGLE UNIONS

For Connecting Conduit to a Unilet. Not made in long type.

Male end given first and is threaded to fit hubs of GRUO and GRUJ series Unilets.



Cat. No.	Size	—Dimensions— A	B	C	Std. Pkg.	Price Each
UNL84	½ to ½	2 11/16	1⅞	1 13/16	25	*
UNL85-R	½ to ¾	2 11/16	1⅞	1 9/16	25	*
UNL86-R	¾ to ½	2⅛	1⅞	1 13/16	25	*
UNL86	¾ to ¾	2⅛	1⅞	1 9/16	25	*

Cadmium finish.

*Male end given first and is threaded to fit in hubs of GRUO and GRUJ series Unilets.

†End at right in illustration is for ¾-inch conduit.

*See Price List

APPLETON ELECTRIC COMPANY

GRU SERIES UNILETS

EXPLOSION-PROOF AND DUST-TIGHT FITTINGS

Furnished with Blank Cover and Form 2 Threaded Union Hubs as Standard†

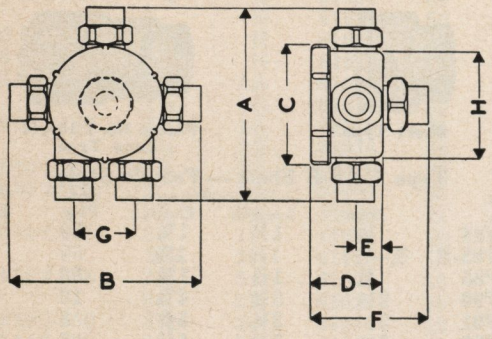


Type "GRUSE" Unilet Explosion-proof and Dust-tight.

Unilets of the GRU series are used as junction boxes for wiring in all hazardous locations. The GRU series Unilet bodies are furnished with external threads for cover. All metal to metal joints are machined perfectly.

Any of the GRU series of Unilets can be furnished with special arrangement of ½-inch and ¾-inch hubs in the same body. In ordering such Unilets furnish sketch with order and indicate the hubs and size of conduit each special hub is to accommodate. No extra charge for Unilets furnished in this way.

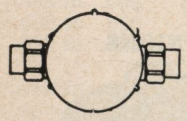
Type GRU—Dimensions



EXPLOSION-PROOF AND DUST-TIGHT

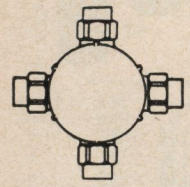
Size	A	B	C	D	E	F	G	H
½-¾"	7 1/16"	7 1/16"	3 1/16"	2½"	1 1/16"	4 5/16"	2⅛"	3¾"
1"	9"	9"	3 1/16"	2⅝"	1 1/16"	5¼"	2¼"	3¾"

TYPE GRUC



Cat. No.	Size Inches	Price Each
42000	½	*
42001	¾	*
42002	1	*

TYPE GRUX



Cat. No.	Size Inches	Price Each
42005	½	*
42006	¾	*
42007	1	*

Cadmium finish.

†Union hubs are so made that ½ and ¾-inch Unions may be used for either ½ or ¾-inch conduit size.

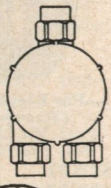
*See Price List

GRU SERIES UNILETS

EXPLOSION-PROOF AND DUST-TIGHT FITTINGS

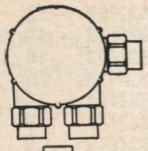
Furnished with Blank Cover and Form 2 Regular Threaded Hubs as Standard†

TYPE GRUSE



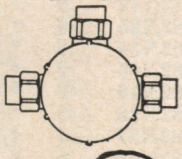
Cat. No.	Size Inches	Price Each
42010	½	*
42011	¾	*

TYPE GRUSL



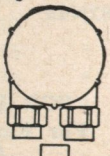
Cat. No.	Size Inches	Price Each
42015	½	*
42016	¾	*

TYPE GRUT



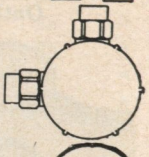
Cat. No.	Size Inches	Price Each
42020	½	*
42021	¾	*
42022	1	*

TYPE GRUS



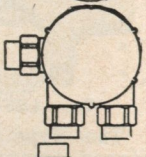
Cat. No.	Size Inches	Price Each
42025	½	*
42026	¾	*

TYPE GRUEL



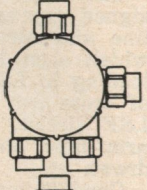
Cat. No.	Size Inches	Price Each
42030	½	*
42031	¾	*
42032	1	*

TYPE GRUSR



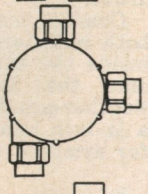
Cat. No.	Size Inches	Price Each
42035	½	*
42036	¾	*

TYPE GRUSEL



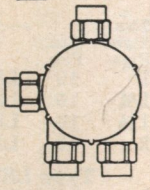
Cat. No.	Size Inches	Price Each
42040	½	*
42041	¾	*

TYPE GRUSREL



Cat. No.	Size Inches	Price Each
42045	½	*
42046	¾	*

TYPE GRUSER



Cat. No.	Size Inches	Price Each
42050	½	*
42051	¾	*

Cadmium finish.

†Union hubs are so made that ½ and ¾-inch Unions may be used for either ½ or ¾-inch conduit size.

*See Price List

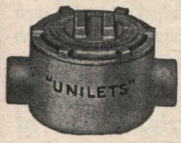
APPLETON ELECTRIC COMPANY

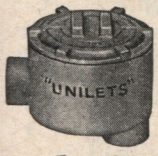
GRU SERIES UNILETS

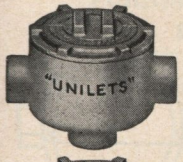
EXPLOSION-PROOF AND DUST-TIGHT WITH REGULAR THREADED HUBS

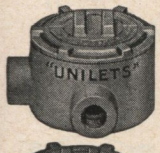
Furnished with External Threaded Surface Covers



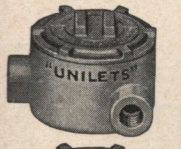


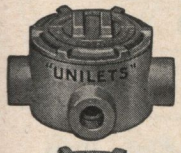


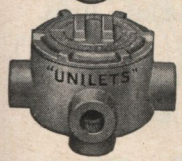


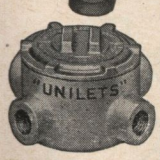












Type	Cat. No.	Size Inches	Price Each
GRE	GRE 50	½	*
	GRE 75	¾	*
	GRE100	1	*
	GRE125	1¼	*
	GRE150	1½	*
GRC	GRC 50	½	*
	GRC 75	¾	*
	GRC100	1	*
	GRC125	1¼	*
	GRC150	1½	*
GRLB	GRLB 50	½	*
	GRLB 75	¾	*
	GRLB100	1	*
	GRLB125	1¼	*
	GRLB150	1½	*
GRCA	GRCA 50	½	*
	GRCA 75	¾	*
GRL	GRL 50	½	*
	GRL 75	¾	*
	GRL100	1	*
	GRL125	1¼	*
	GRL150	1½	*
GRLA	GRLA50	½	*
	GRLA75	¾	*
GRN	GRN 50	½	*
	GRN 75	¾	*
	GRN100	1	*
	GRN125	1¼	*
	GRN150	1½	*
GRT	GRT 50	½	*
	GRT 75	¾	*
	GRT100	1	*
	GRT125	1¼	*
	GRT150	1½	*
GRTA	GRTA50	½	*
	GRTA75	¾	*
GRX	GRX 50	½	*
	GRX 75	¾	*
	GRX100	1	*
	GRX125	1¼	*
	GRX150	1½	*

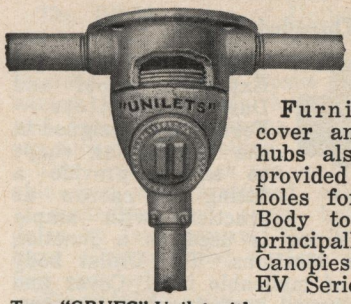
Cadmium finish.

If any of these Unilet Bodies are wanted without a cover for the purpose of using Fixture Canopies, Flush or Fixture Covers, specify Cat. No. of Fitting and indicate "Less Cover".

*See Price List

GRF SERIES FLANGED UNILETS

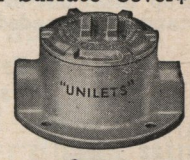
EXPLOSION-PROOF AND DUST-TIGHT WITH REGULAR THREADED HUBS

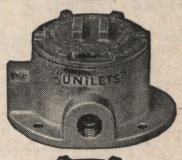


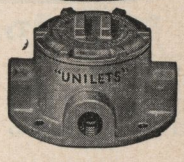
Type "GRUFC" Unilet with Inside Cover Threads and No. 26894 Fixture Canopy Attached.

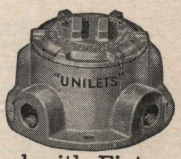
Furnished with blank cover and regular threaded hubs also fastening plate provided with four screw holes for attaching Unilet Body to the ceiling. Used principally with Fixture Canopies in connection with EV Series lighting fixtures.

Furnished with External Threaded Surface Cover‡









Type	Cat. No.	Size Inches	Price Each
GRFC	GRFC 50	½	*
	GRFC 75	¾	*
	GRFC100	1	*
GRFL	GRFL 50	½	*
	GRFL 75	¾	*
	GRFL100	1	*
GRFT	GRFT 50	½	*
	GRFT 75	¾	*
	GRFT100	1	*
GRFX	GRFX 50	½	*
	GRFX 75	¾	*
	GRFX100	1	*

‡When these Unilets are to be used with Fixture Canopies listed below, specify "less cover" at a reduction in price.

FIXTURE CANOPIES

For Use in Suspending "Type AAP" Fixtures



Cat. No.	Size	
26894	½	For use with "GRF," "GR" Form 1
26895	¾	Unilet bodies having internal threads
26896	1	for cover
36894	½	For use with "DER" and "GR" Form 2
36895	¾	Unilet bodies having internal threads
36896	1	for cover
46894	½	For use with "GR" Form 3 series
46895	¾	Unilet bodies having internal
46896	1	threads for cover

APPLETON ELECTRIC COMPANY

ER SERIES UNILETS — FORM 1

EXPLOSION-PROOF AND DUST-TIGHT FITTINGS

With Threaded Hubs†

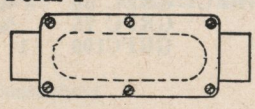


Type "ERC" — Form 1

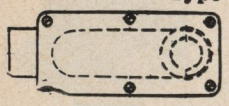
The ER Series of Explosion - proof and Dust-tight Unilets — Form 1 was designed in the rectangular shape so as to provide a fitting as narrow as practical with ample wiring space. This series is used as a junction box in all hazardous locations. The Unilet body and cover are made of malleable iron. Cover and Unilet body have a ground surface where the two parts join each other. The cover is attached to the Unilet body by means of six screws. The cover screws are fixed into place so it is impossible to drop them out of the cover. The conduit hubs are standard threaded hubs.

Type ERC — Form 1

Cat. No.	Type	Size In.	Price Each
41102	ERC	½	*
41122	ERC	¾	*



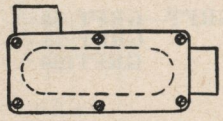
Type ERLB — Form 1



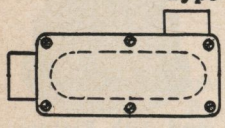
Cat. No.	Type	Size In.	Price Each
41108	ERLB	½	*
41128	ERLB	¾	*

Type ERLL — Form 1

Cat. No.	Type	Size In.	Price Each
41105-L	ERLL	½	*
41125-L	ERLL	¾	*



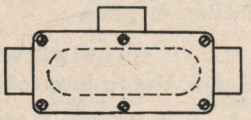
Type ERLR — Form 1



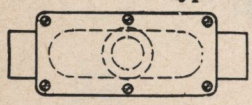
Cat. No.	Type	Size In.	Price Each
41105-R	ERLR	½	*
41120-R	ERLR	¾	*

Type ERT — Form 1

Cat. No.	Type	Size In.	Price Each
41103	ERT	½	*
41123	ERT	¾	*



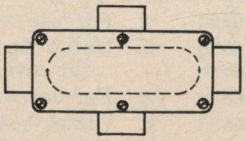
Type ERTB — Form 1



Cat. No.	Type	Size In.	Price Each
41109	ERTB	½	*
41129	ERTB	¾	*

Type ERX — Form 1

Cat. No.	Type	Size In.	Price Each
41104	ERX	½	*
41124	ERX	¾	*



†Dotted lines in bottom of cuts indicate Hubs.

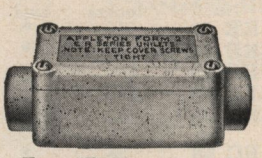
Cadmium is the standard finish.

*See Price List

ER SERIES UNILETS — FORM 2

EXPLOSION-PROOF AND DUST-TIGHT FITTINGS

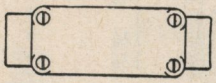
With Threaded Hubs†



Type "ERC" — Form 2

The ER Series — Form 2 — Explosion-proof and Dust-tight Unilets listed below are similar to Form 1, except that they are smaller in size but of the same rectangular shape and provide a fitting of the proper size and with ample wiring space for use as a junction box in hazardous locations, more particularly, wiring of gasoline pumps. Made of malleable iron.

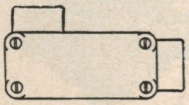
Type ERC — Form 2



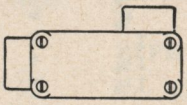
Cat. No.	Type	Size In.	Price Each
41150	ERC	½	*
41151	ERC	¾	*

Type ERLL — Form 2

Cat. No.	Type	Size In.	Price Each
41155	ERLL	½	*
41156	ERLL	¾	*



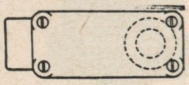
Type ERLR — Form 2



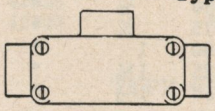
Cat. No.	Type	Size In.	Price Each
41160	ERLR	½	*
41161	ERLR	¾	*

Type ERLB — Form 2

Cat. No.	Type	Size In.	Price Each
41165	ERLB	½	*
41166	ERLB	¾	*



Type ERT — Form 2



Cat. No.	Type	Size In.	Price Each
41170	ERT	½	*
41171	ERT	¾	*

Type ERTB — Form 2

Cat. No.	Type	Size In.	Price Each
41175	ERTB	½	*
41176	ERTB	¾	*



†Dotted lines in bottom of cuts indicate Hubs.

*See Price List

For Quick Service On

EVERYTHING ELECTRICAL

Telephone Your Order

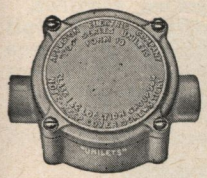
Our Number

Is on The Cover

of This Catalog

APPLETON ELECTRIC COMPANY

FGS SERIES UNILETS
EXPLOSION-PROOF AND DUST-TIGHT FITTINGS
With Threaded Hubs†



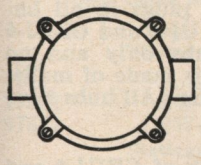
Type FGSC

The FGS series of Unilets with blank covers are used as Junction Boxes for wiring in hazardous locations. They are particularly adapted for wiring systems which run along a high ceiling.

The Unilet bodies are malleable iron and furnished with a blank malleable iron cover held down by four screws. The Unilet body and cover have a ground flat surface where the two parts join each other.

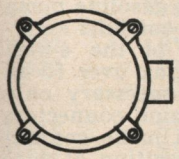
The FGS series of Unilets are regularly furnished without fastening lugs, but if fastening lugs are wanted, same can be furnished at a slight additional cost. If fastening lugs are desired, specify catalog number and add "With fastening lugs."

FURNISHED WITH BLANK COVER



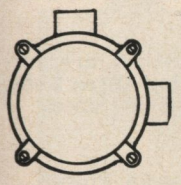
TYPE FGSC

Cat. No.	Form	Unilet Size In.	O. S. Diam.	Dph. In.	Price Each
73002	5-10	½	3⅜	2	*
73012	5-10	¾	3⅜	2	*
73022	5-10	1	3⅜	2	*
73052	20	½	4⅝	2	*
73062	20	¾	4⅝	2	*
73072	20	1	4⅝	2	*



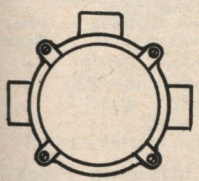
TYPE FGSE

Cat. No.	Form	Unilet Size In.	O. S. Diam.	Dph. In.	Price Each
73001	5-10	½	3⅜	2	*
73011	5-10	¾	3⅜	2	*
73021	5-10	1	3⅜	2	*
73051	20	½	4⅝	2	*
73061	20	¾	4⅝	2	*
73071	20	1	4⅝	2	*



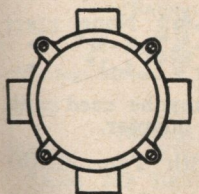
TYPE FGSL

Cat. No.	Form	Unilet Size In.	O. S. Diam.	Dph. In.	Price Each
73005	5-10	½	3⅜	2	*
73015	5-10	¾	3⅜	2	*
73025	5-10	1	3⅜	2	*
73055	20	½	4⅝	2	*
73065	20	¾	4⅝	2	*
73075	20	1	4⅝	2	*



TYPE FGST

Cat. No.	Form	Unilet Size In.	O. S. Diam.	Dph. In.	Price Each
73003	5-10	½	3⅜	2	*
73013	5-10	¾	3⅜	2	*
73023	5-10	1	3⅜	2	*
73053	20	½	4⅝	2	*
73063	20	¾	4⅝	2	*
73073	20	1	4⅝	2	*



TYPE FGSX

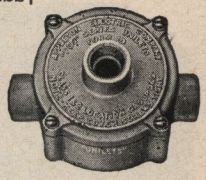
Cat. No.	Form	Unilet Size In.	O. S. Diam.	Dph. In.	Price Each
73004	5-10	½	3⅜	2	*
73014	5-10	¾	3⅜	2	*
73024	5-10	1	3⅜	2	*
73054	20	½	4⅝	2	*
73064	20	¾	4⅝	2	*
73074	20	1	4⅝	2	*

†Can be furnished with bottom hubs, if specified on orders.

Cadmium is standard finish.

*See Price List

BFGS SERIES UNILETS
EXPLOSION-PROOF AND DUST-TIGHT FITTINGS
With Threaded Hubs†



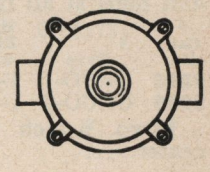
Type BFGSC

The BFGS series of Unilets are supplied with a cover having a ½-inch hub in center. Also used as Junction Boxes for wiring in hazardous locations and for wiring systems which run along a high ceiling.

The Unilet bodies are malleable iron and furnished with a malleable iron cover held down by four screws. The Unilet body and cover have a ground flat surface where the two parts join each other.

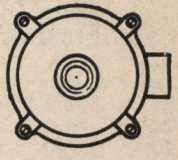
The BFGS series of Unilets are regularly furnished without fastening lugs, but if fastening lugs are wanted, same can be furnished at a slight additional cost. If fastening lugs are desired, specify catalog number and add "With fastening lugs."

FURNISHED WITH ½-INCH HUB COVER‡



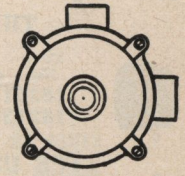
TYPE BFGSC

Cat. No.	Form	Unilet Size In.	O. S. Diam.	Dph. In.	Price Each
73202	5-10	½	3⅜	2	*
73212	5-10	¾	3⅜	2	*
73232	5-10	1	3⅜	2	*
73252	20	½	4⅝	2	*
73262	20	¾	4⅝	2	*
73282	20	1	4⅝	2	*



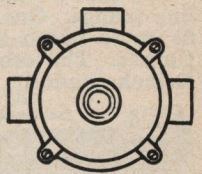
TYPE BFGSE

Cat. No.	Form	Unilet Size In.	O. S. Diam.	Dph. In.	Price Each
73201	5-10	½	3⅜	2	*
73211	5-10	¾	3⅜	2	*
73231	5-10	1	3⅜	2	*
73251	20	½	4⅝	2	*
73261	20	¾	4⅝	2	*
73281	20	1	4⅝	2	*



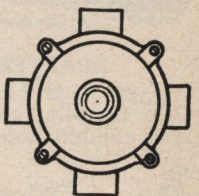
TYPE BFGSL

Cat. No.	Form	Unilet Size In.	O. S. Diam.	Dph. In.	Price Each
73205	5-10	½	3⅜	2	*
73215	5-10	¾	3⅜	2	*
73235	5-10	1	3⅜	2	*
73255	20	½	4⅝	2	*
73265	20	¾	4⅝	2	*
73285	20	1	4⅝	2	*



TYPE BFGST

Cat. No.	Form	Unilet Size In.	O. S. Diam.	Dph. In.	Price Each
73203	5-10	½	3⅜	2	*
73213	5-10	¾	3⅜	2	*
73233	5-10	1	3⅜	2	*
73253	20	½	4⅝	2	*
73263	20	¾	4⅝	2	*
73283	20	1	4⅝	2	*



TYPE BFGSX

Cat. No.	Form	Unilet Size In.	O. S. Diam.	Dph. In.	Price Each
73204	5-10	½	3⅜	2	*
73214	5-10	¾	3⅜	2	*
73234	5-10	1	3⅜	2	*
73254	20	½	4⅝	2	*
73264	20	¾	4⅝	2	*
73284	20	1	4⅝	2	*

†Can be furnished with bottom hubs if specified on orders.

‡Can be furnished with ¾-inch hubs if specified at slight additional cost.

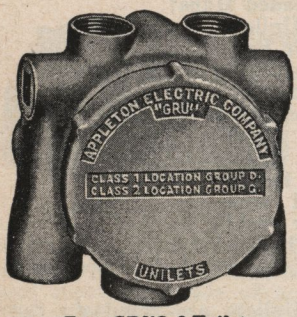
Cadmium is standard finish.

*See Price List

GRUO SERIES UNILETS

EXPLOSION-PROOF AND DUST-TIGHT UNIVERSAL UNILETS

With Threaded Hubs and Close-up Plugs



Type GRUO-2 Unilet

The GRUO series is used as a junction box and is termed a Universal Unilet because practically any combination of outlets can be made with the use of close-up plugs, reducers, and connectors listed below. In many installations it is not always necessary to use union connectors for attaching the conduit to the Unilet body. In such cases, standard threaded rigid conduit can be connected into the threaded conduit hubs of the GRUO Unilet body.

Made of malleable iron with a brass screw-on cover. Overall dimensions are 5x5¼x2⅜ inches deep. The Unilet is furnished with close-up plugs in all but three of the conduit hubs. Three conduit hubs at all times are left open.

Cat. No.	Type	Hubs Each Side	Top End Hubs	Bottom End Hubs	Back Hub	Price Each
9295	GRUO-1	1–¾"	2–¾"	3–¾"	1–¾"	*
9296	GRUO-2	1–¾"	2–¾"	†	1–¾"	*

†Two ¾-inch in bottom and one 1-inch in center.

ACCESSORIES FOR TYPE GRUO AND GRUJ UNILETS

THREADED CLOSE-UP PLUGS

Cat. No.	Size Inches	Price Each	Cat. No.	Size Inches	Price Each
21	½	*	25	1½	*
22	¾	*	26	2	*
23	1	*	27	2½	*
24	1¼	*	28	3	*



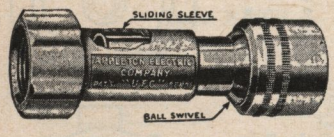
THREADED REDUCERS



Cat. No.	Size Inches	Price Each
18201	¾ to ½	*
18213	1 to ¾	*

TYPE UFC FLEXIBLE COUPLING

Provides a flexible wiring combination for gasoline pumps. One end of the Coupling is made to fit on to union hubs of the GRU and ER Series Unilets. The other end connects to either ½ or ¾-inch conduit.



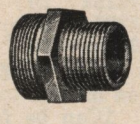
Type UFC

Cat. No.	Size Inches	Price Each
9285	½	*
9286	¾	*

ADAPTER WITH MALE THREADS

Type ADM Adapter is designd to join the Type UFC Coupling to any fitting with either ½ or ¾-inch conduit hubs.

Cat. No.	Type	Size Inches	Price Each
9290	ADM	½	*
9291	ADM	¾	*

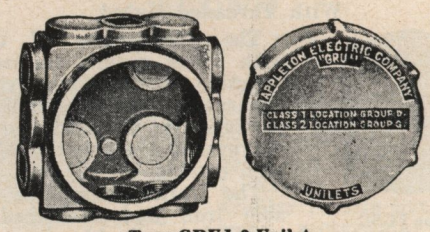


Cadmium is standard finish.

*See Price List

GRUJ SERIES UNILETS

EXPLOSION-PROOF AND DUST-TIGHT UNIVERSAL UNILETS



Type GRUJ-2 Unilet With Cover Removed Showing Close-up Plugs in Certain Threaded Openings

The GRUJ series like the GRUO series is used as a junction box and is termed a Universal Fitting because practically any combination of outlets can be made with the use of close-up plugs, reducers and connectors listed in the preceding column.

The GRUJ series of Unilets furnished in 4 types as listed below. Types GRUJ-1, GRUJ-2 and GRUJ-5 furnished with close-up plugs in all but three hubs while GRUJ-3 and GRUJ-4 and GRUJ-6 are furnished with threaded hubs only and no close-up plugs. The Unilet body is made of malleable iron with brass screw-on cover. All hubs have conduit stops.

The 4 conduit hubs in the back of GRUJ-2 and GRUJ-4 are on the same centers as knockouts in 4-inch square outlet box No. 4-S, commonly known as the 1900 box. Many old gasoline pump wiring installations are made with conduits entering through the back knockouts of the 4-inch square outlet box, so when changing over to an explosion-proof installation, it is necessary only to remove the outlet box, attach union connectors to the existing conduits, and then make connection to the Unilet. Requires no cutting of conduits or bending conduits to meet the openings in the Unilet.

Types GRUJ-1, GRUJ-2 and GRUJ-5 are furnished with Close-up Plugs in all but three hubs. Three conduit hubs at all times are left open.

With Threaded Hubs and Close-up Plugs

Cat. No.	Type	Hubs Each Side	Top End Hubs	Bottom End Hubs	Back Hub	Price Each
8650	GRUJ-1	2–¾"	1–¾"	2–¾"	None	*
8651	GRUJ-2	2–¾"	1–¾"	2–¾"	4–¾"	*
8652	GRUJ-5	2–¾"	1–¾"	2–¾"	4–1"	*

With Threaded Hubs—Without Close-up Plugs

8655	GRUJ-3	2–¾"	1–¾"	2–¾"	None	*
8656	GRUJ-4	2–¾"	1–¾"	2–¾"	4–¾"	*
8657	GRUJ-6	2–¾"	1–¾"	2–¾"	4–1"	*

Type UFC flexible coupling may be used with GRUJ Unilets by using type ADM adapter.

Accessories same as used with Type GRUO Unilets.

Cadmium is standard finish.

*See Price List

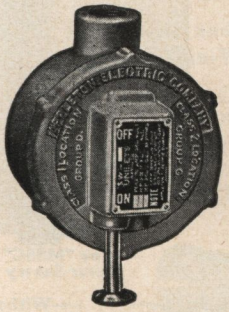
APPLETON ELECTRIC COMPANY

EXPLOSION-PROOF AND DUST-TIGHT SWITCHES

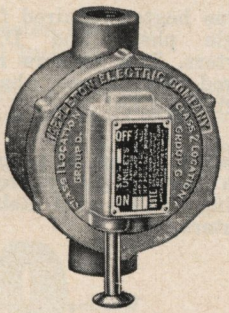
SINGLE GANG WITH THREADED HUBS

Switches mounted in Explosion-proof and Dust-tight Unilets are made according to Underwriters' specifications for use in all hazardous locations. All switches operate by means of a shaft extending through an accurately machined bearing surface.

Switches of other ratings and connections not listed can be furnished. Prices on application.



Type E
GRU Unilet Body



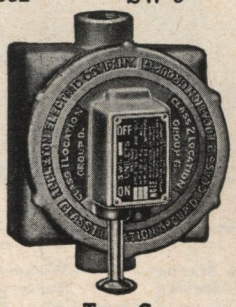
Type C
GRU Unilet Body

Type E—GRU Unilet Body

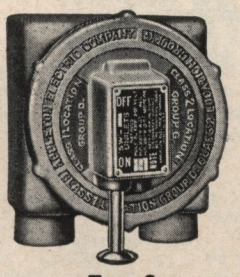
Cat. No.	Series	Pole	Size Inches	Price Each
	*Rating: Motors 2 H.P. 220-V., A.C.			
17601	SW-4	1	½	*
17621	SW-4	1	¾	*
	*Rating: Motors 2 H.P. 220-V., A.C. 1 H.P. 230-V., D.C.			
17611	SW-5	2	½	*
17631	SW-5	2	¾	*

Type C—GRU Unilet Body

	*Rating: Motors 2 H.P. 220-V., A.C.			
17602	SW-4	1	½	*
17622	SW-4	1	¾	*
	*Rating: Motors 2 H.P. 220-V., A.C. 1 H.P. 230-V., D.C.			
17612	SW-5	2	½	*
17632	SW-5	2	¾	*



Type C
CBU Unilet Body



Type S
CBU Unilet Body

Type C—CBU Unilet Body

	*Rating: Motors 1 H.P. 440-V., A.C.; 2 H.P. 220-V., A.C.; ½ H.P. 550-V., A.C.		
17642	SW-18	3	¾ *
	*Rating: Motors 2 H.P. 220-V., A.C.		
17652	SW-19	4	¾ *

Type S—CBU Unilet Body

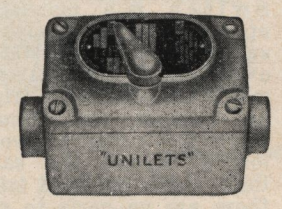
	*Rating: Motors 1 H.P. 440-V., A.C.; 2 H.P. 220-V., A.C.; ½ H.P. 550-V., A.C.		
17610	SW-18	3	¾ *
	†Rating: Motors 2 H.P. 220-V., A.C.		
17620	SW-19	4	¾ *

*Also for light circuit 30 amp. 250-volt A.C.-D.C. †Also for light circuit 30 amp. 250-volt A.C. Cadmium finish.

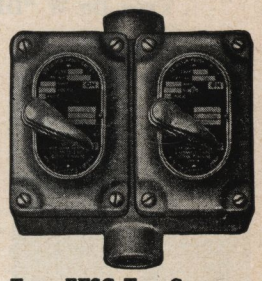
*See Price List

EFS SERIES EXPLOSION-PROOF AND DUST-TIGHT SWITCHES

WITH OPERATING HANDLE—WITH TUMBLER SWITCHES



Type EFSC Single Gang



Type EFSC Two-Gang

Type EFS Single-Gang

Size In.	Ratings Ampere 125 V.	Ratings Ampere 250 V.	Cat. No.	Price Each	Ratings Amp. 250 V.V.	Ratings Amp. 230 AC	Ratings H.P. Cat. No.	Price Each
			Single-Pole Switch					
½	20	10	61501	*	..	.	.....	....
¾	20	10	61511	*	30	2	61711	*
			Double-Pole Switch					
¾	20	10	61531	*	30	2	*61731	*
			Three-Way Switch					
½	20	10	61541	*	..	.	.....	....
¾	20	10	61551	*	..	.	.....	....
			Four-Way Switch					
½	5	2	61561	*	..	.	.....	....
¾	5	2	61571	*	..	.	.....	....

Type EFSC Single-Gang

			Single-Pole Switch					
½	20	10	61502	*	30	2	61702	*
¾	20	10	61512	*	30	2	61712	*
			Double-Pole Switch					
½	20	10	61522	*	..	.	.....	....
¾	20	10	61532	*	30	2	*61732	*
			Three-Way Switch					
½	20	10	61542	*	..	.	.....	....
¾	20	10	61552	*	..	.	.....	....
			Four-Way Switch					
½	5	2	61562	*	..	.	.....	....
¾	5	2	61572	*	..	.	.....	....

Type EFS Two-Gang

			Single-Pole Switches					
½	20	10	61601	*	..	.	.....	....
¾	20	10	61611	*	30	2	61811	*
			Double-Pole Switches					
1	..	20	61631	*	30	[illegible]	61831	*
			Three-Way Switches					
1	20	10	61651	*	..	.	.....	....
			Four-Way-Way Switches					
1	5	2	61671	*	..	.	.....	....

Type EFSC Two-Gang

			Single-Pole Switches					
½	20	10	61602	*	..	.	.....	....
¾	20	10	61612	*	30	2	61812	*
			Double-Pole Switches					
½	20	10	61622	*	..	.	.....	....
¾	20	10	61632	*	30	2	*61832	*
			Three-Way Switches					
½	20	10	61642	*	..	.	.....	....
¾	20	10	61652	*	..	.	.....	....
			Four-Way Switches					
½	5	2	61662	*	..	.	.....	....
¾	5	2	61672	*	..	.	.....	....

Cadmium finish.

Overall Dimensions, exclusive of hubs: Single Gang, length 4⅛ inches; width, 3 inches; depth 4⅛ inches over Handle. Two-Gang, length, 4⅛ inches; width, 6⅛ inches; depth 4⅛ inches over Handle.

*Approved for 1 H.P. 440-volt AC., 2 H.P. 220-volt AC.

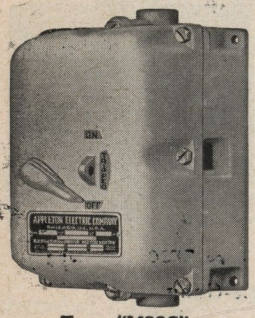
*See Price List

APPLETON ELECTRIC COMPANY

MSS SERIES

EXPLOSION-PROOF AND DUST-TIGHT MOTOR SENTRY

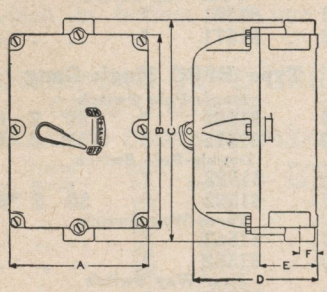
Furnished With or Without Westinghouse Type Dn W "DE-ION" Motor Starter



Type "MSSC" Motor Sentry

The "MSS" Series Switch is a manually operated motor starting switch with thermostatic overload protection, which automaticly trips and breaks the circuit when the motor is overloaded beyond the safe limit. After overload trip, there are no parts to renew or replace. The operator simply resets the switch to extreme "off" and then "on" after cooling.

The "MSS" Motor Sentry Body and Cover are made of malleable iron. The operating handle is provided with means for locking the handle in cases where it is advisable to do so. Locking the handle does not affect automatic tripping mechanism, but when the automatic breaker mechanism has tripped, it is necessary to unlock the handle before resetting the switch.



Dimensions

In. A	In. B	In. D	In. E		In. ½	In. ¾	In. 1
6 5/16	8¾	5½	2⅝	Hub F	39/64	49/64	1 5/16
				C	9 15/16	10 1/16	10-5/6

Fastening Holes Spacing 8 5/16" x 4¾". 11/32" Diameter Holes.

Horse Power Rating

Westinghouse Max. Amp.	Three Phase 110V	Three Phase 220V	Three Phase 440V 600V	Single Phase 110V	Single Phase 220V	Single Phase 440V 600V	Direct Current 115V	Direct Current 230V
0	13½	1½	2	2	1	1½	1½	1	1
1	22½	3	5	7½	1½	3	5	1	1½

One heater required for Single Phase and D.C. Starters. Two heaters required for Three Phase Starters. Select heaters of proper Ampere capacity rating from listing of Thermal Relay Heaters.

Unilets without the Starter will be supplied with a name plate on which spaces for ratings are provided and ratings must be inserted with a steel marking stamp. The rating on the name plate must agree with the corresponding rating on the Starter. If Starter ratings are specified at the time the order is placed, the name plates will be marked with the proper ratings at the factory.

Cadmium finish.

***See Price List**

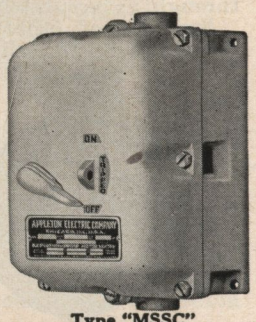
MSS SERIES

EXPLOSION-PROOF AND DUST-TIGHT MOTOR SENTRY

Furnished With or Without Westinghouse Type Dn W "DE-ION" Motor Starter

TYPE "MSSC"

Complete with Two Threaded Hubs One at Each End



Type "MSSC" Motor Sentry

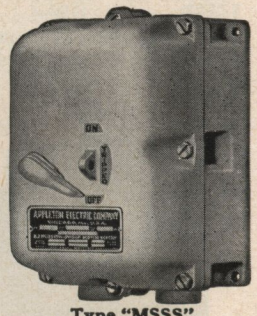
One heater required for single phase and D.C. starters. Two heaters required for three phase starters.

Select heaters of proper Ampere capacity from listing of Thermal Relay Heaters.

Phase	Westinghouse Switch Size	Hub Size	With Starter and Heater Cat. No.	With Starter and Heater Price Each	Without Starters§ Cat. No.	Without Starters§ Price Each
3 and 2 Phase	0	¾	52500	*	52550	*
	1	¾	52501	*	52550	*
	1	1	52502	*	52555	*
1 Phase 2 Wire	0	¾	52505	*	52550	*
	1	¾	52506	*	52550	*
	1	1	52507	*	52555	*
Direct Current	0	½	52510	*	52560	*
	1	¾	52511	*	52550	*

TYPE "MSSS"

Complete with Two Threaded Hubs at One End



Type "MSSS" Motor Sentry

One heater required for single phase and D.C. starters. Two heaters required for three phase starters.

Select heaters of proper Ampere capacity from listing of Thermal Relay Heaters.

Phase	Westinghouse Switch Size	Hub Size	With Starter and Heaters Cat. No.	With Starter and Heaters Price Each	Without Starters§ Cat. No.	Without Starters§ Price Each
3 and 2 Phase	0	¾	52520	*	52570	*
	1	¾	52521	*	52570	*
	1	1	52522	*	52575	*
1 Phase 2 Wire	0	¾	52525	*	52570	*
	1	¾	52526	*	52570	*
	1	1	52527	*	52575	*
Direct Current	0	½	52530	*	52580	*
	1	¾	52531	*	52570	*

Cadmium finish.

§Unilets without the Starter will be supplied with a name plate on which spaces for rating are provided and ratings must be inserted with a steel marking stamp. The rating on the name plate must agree with the corresponding rating on the Starter. If Starter ratings are specified at the time the order is placed, the name plates will be marked with the proper ratings at the factory.

***See Price List**

APPLETON CONDUIT FITTINGS

For Use with Electrical Metallic Tubing

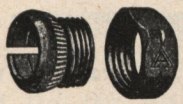
APPLETON UTILITY WRENCH



For Easier and Faster Assembly of Thin-Wall Fittings

For use with Appleton Compression Type Couplings and Connectors and Economy 2-Piece Connectors.

Cat. No.	Size	Std. Pkg.	Carton
W5075	½" and ¾"	20	10
W1125	1" and 1¼"	5	1



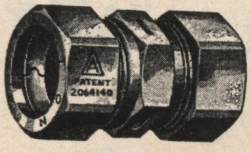
ECONOMY 2-PIECE CONNECTORS

Lower cost. Speedier in use. Grips like a vise. More wiring room. Easier to install. Concrete tight.

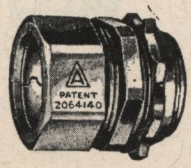
Cat. No.	Size	Std. Pkg.	Carton
92T050	½"	500	50
92T075	¾"	250	25
92T100	1"	200	25

COMPRESSION RING TYPE COUPLINGS AND CONNECTORS—RAINTIGHT

For Electrical Metallic Tubing



Patent 2064140 Coupling Compression Ring Type Approved Raintight



Patent 2064140 Connector Compression Ring Type Approved Raintight

Size In.	Carton	Std. Pkg.	Couplings Cat. No.	Couplings Wt. Lb. Per 100	Connectors Cat. No.	Connectors Wt. Lb. Per 100	Price Schedule
½	50	500	95T050	13	96T050	11	"TW"
¾	25	250	95T075	15	96T075	13	"TW"
1	25	200	95T100	20	96T100	20	"TW"
1¼	5	25	95T125	50	96T125	50	"TW"
1½	2	10	95T150	80	96T150	60	"TW"
2	1	5	95T200	140	96T200	100	"TW"



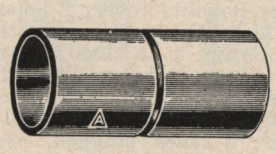
ONE-SCREW STEEL CLAMPS

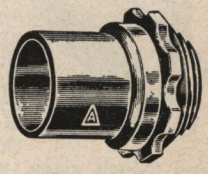
Cat. No.	Size Inches	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Schedule
172T50	½	500	2000	57	"TW"
172T51	¾	200	2000	65	"TW"

APPLETON CONDUIT FITTINGS

For Use With Electrical Metallic Tubing

INDENTER TYPE COUPLINGS AND CONNECTORS





Size In.	Carton	Std. Pkg.	Couplings Cat. No.	Couplings Pkg. Wt. Lbs.	Couplings Price Schedule	Connectors Cat. No.	Connectors Pkg. Wt. Lbs.	Connectors Price Schedule
½	50	200	97T050	10	"TW"	98T050	12	"TW"
¾	25	100	97T075	10	"TW"	98T075	12	"TW"
1	25	100	97T100	10	"TW"	98T100	12	"TW"



BENDING TOOL

Especially designed for bending Electrical Metallic Tubing. Makes bends in exactly the right place and with very little effort.

Cat. No.	Size In.	Std. Pkg.	Wt. Lbs. Each	Price Schedule
14195	½	1	2½	"TW"
14196	¾	1	4⅛	"TW"
14197	1	1	7	"TW"

OFFSET BENDING HICKEYS

This hickey is of special design for short bends, tight corners and for "stubbing up" in concrete work.



Cat. No.	Size In.	Description	Wt. Lbs. Each	Price Schedule
12195	½	(Use ¾" pipe handle)	1¾	"TW"
12196	¾	(Use 1" pipe handle)	2¾	"TW"
12197	1	(Use 1" pipe handle)	4	"TW"
12198	1¼	(Use 1¼" pipe handle)	10	"TW"
12199	1½	(Use 1¼" pipe handle)	12½	"TW"
12200	2	(Use 1½" pipe handle)	15	"TW"



ONE-SCREW MALLEABLE CLAMPS

Cat. No.	Size Inches	Carton	Std. Pkg.	Wt. Lbs. Per 100	Price Schedule
171T49	⅜	200	2000	3	"TW"
171T50	½	100	500	3¾	"TW"
171T51	¾	100	100	5½	"TW"
171T52	1	100	100	7	"TW"
171T53	1¼	20	40	11	"TW"
171T54	1½	20	40	15	"TW"
171T55	2	5	20	17	"TW"

APPLETON CONDUIT FITTINGS

Cadmium Finish

For Use with Electrical Metallic Tubing (Thin-Wall Conduit)

TYPE FEBS FITTINGS



½-inch size with Combination 2, 3 and 4-wire Bakelite cover; 2 holes plugged. ¾ to 1¼-inch sizes, with Combination 2, 3, 4 and 5-wire Bakelite covers; 2 holes plugged. 1¼-inch size (FT125S) with Combination 4, 5, 6 and 7-wire Composition cover; 3 holes plugged. 1½ and 2-inch sizes, with Combination 2, 3, 4, 5 and 6-wire Bakelite covers; 4 holes plugged.

Cat. No.	Size In.	Insulator	Size of Holes	Carton	Std. Pkg.	Wt. Lbs. Per 100	Price Schedule
FT- 50	½	4	4-$\frac{5}{16}$	10	40	55	"TW"
FT- 75	¾	5	3-$\frac{13}{32}$, 2-⅜	10	40	63	"TW"
FT-100	1	5	3-½, 2-$\frac{13}{32}$	2	20	105	"TW"
FT-125	1¼	5	3-⅝, 2-$\frac{13}{32}$	1	10	145	"TW"
FT-125S	1¼	7	5-$\frac{11}{16}$, 2-$\frac{9}{16}$	1	10	21	"TW"
FT-150	1½	6	3-$\frac{25}{32}$, 2-$\frac{9}{16}$ 1-⅜	1	5	260	"TW"
FT-200	2	6	3-1, 2-¾ 1-$\frac{17}{32}$	1	5	520	"TW"

TYPE SLAY FITTINGS

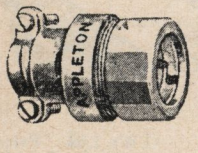
Approved Raintight



With flanged cover and gasket. Will be supplied with sealing screws when specified at no additional charge.

Cat. No.	Size In.	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Schedule
317T90	½	10	40	30½	"TW"
317T91	¾	10	20	42	"TW"
317T92	1	5	10	35	"TW"
317T93	1¼	1	10	30	"TW"

COMBINATION NO-THREAD COUPLINGS



For Connecting Flexible Steel Conduit or Armored Bushed Cable to Electrical Metallic Tubing.

Cat. No.	Size In.	Designed to Hold	Max. Dia. Hole	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Schedule
18854	½	⅜" Flex.	...	10	40	7	"TW"
18855	½	½" Flex.	$\frac{15}{16}$	10	40	8	"TW"
18856	¾	¾" Flex.	1⅛	10	40	11	"TW"

90-DEGREE SHORT ELBOW



Cat. No.	Size In.	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Schedule
73T90	½	10	40	9	"TW"
73T91	¾	10	40	11	"TW"
73T92	1	5	20	13	"TW"



TYPE FEL SPECIAL ENTRANCE ELL

Cat. No.	Size In.	Carton	Std. Pkg.	Std. Pkg.	Price Schedule
37T90	½	25	100	30	"TW"
37T91	¾	10	40	21	"TW"
37T92	1	5	20	20	"TW"
37T93	1¼	5	20	27	"TW"

APPLETON BOX CONNECTORS

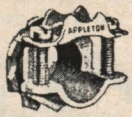
For Armored Cable and Flexible Steel Conduit



No. 7285-V



No. 7315-V



No. 7260-V with Clamp in Regular Position Open to Maximum Capacity

Cat. No.	Size In.	Size K.O. In.	Approx. Opening In.	Approx. Closed In.	Diam. of Bushed Hole In.	Wt. Lbs. Per 1000
For use with 14-2, 14-3, 14-4, 12-2, 12-3, 12-4, 10-2, 14-2L, 12-2L. Also Flexible Steel Conduit 5/16—⅜ inch.						
7285-V	⅜	½	.625	.250	$\frac{13}{32}$	75
Standard package, 1000; carton quantity, 100.						
For use with 14-2, 14-3, 12-2. Also Flexible Steel Conduit 5/16 inch.						
7315-V	⅜	½	.531	.250	$\frac{13}{32}$	87
Standard package, 1000; carton quantity, 100.						
For 14-2, 14-3, 12-2. Also 5/16 inch Flexible Steel Conduit and 3/16 inch ground wire.						
Reverse clamp for $\frac{3}{16}$ inch diameter ground wire.						
7260-V	⅜	½	.531	.187	$\frac{13}{32}$	98
Standard package, 1000; carton quantity, 100.						



No. 7225-V



No. 7287-V

Cat. No.	Size In.	Size K.O. In.	Approx. Opening In.	Approx. Closed In.	Diam. of Bushed Hole In.	Wt. Lbs. Per 1000
For use with 14-2, 14-3, 12-2. Also Flexible Steel Conduit 5/16 inch.						
7225-V	⅜	½	.531	.375	$\frac{13}{32}$	76
Standard package, 1000; carton quantity, 100.						
For 10-3, 10-4, 8-2, 8-3, 12-3L, 10-2L, 10-3L, also Flexible Steel Conduit ½ inch.						
7287-V	½	½	.937	.625	$\frac{9}{16}$	160
For 10-3, 10-4, 8-2, 8-3, 12-3L, 10-2L, 10-3L, also Flexible Steel Conduit ½ inch.						
7288-V	½S	¾	.937	.500	¾	200
Standard package, 100; carton quantity, 25.						
For 8-3, 8-4, 6-2, 6-3, 4-2, 8-2L, 8-3L, 6-2L, 6-3L. Also Flexible Steel Conduit ¾ inch.						
7289-V	¾	¾	1.125	.875	¾	220
Standard package, 100; carton quantity, 25.						

Schedule "BC" Discounts

APPLETON BOX CONNECTORS

STRAIGHT BOX CONNECTORS—WITH CLAMP

For Flexible Steel Conduit and Armored Cable



No. 7230-V

Regular Type With Locknut

Cat. No.	Size In.	Size K.O. In.	Approx. Opening In.	Approx. Closed In.	Diam. of Bushed Hole In.	Wt. Lbs. Per 100
For 14-2, 14-3, 14-4, 12-2, 12-3, 12-4, 10-2, 10-3, 14-2L, 12-2L. Also Flexible Steel Conduit 5/16—⅜ inch.						
7230-V	⅜	½	.656	.375	13/32	86

Standard package, 1000; carton quantity, 100.

For 10-4, 8-2, 8-3, 10-36, 8-2L. Flexible Steel Conduit ½-inch.						
7231-V	½	½	.937	.750	9/16	140

Standard package, 100; carton quantity, 20.

For 10-4, 8-2, 8-3, 8-4, 6-2, 6-3, 10-3L, 8-2L, 8-3L, 6-2L. Flexible Steel Conduit ¾-inch.						
7312-V	¾	¾	1.093	.750	11/16	210

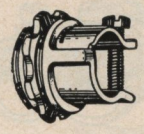
For Flexible Steel Conduit 1-inch.						
7313-V	1	1	1.375	1.000	1	320

Standard package, 25; carton quantity, 5.

Schedule "BC" Discounts

APPLETON BOX CONNECTORS

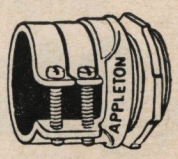
For Flexible Steel Conduit and Armored Cable



No. 7265-V



Nos. 7480-V to 7484 Incl. With One Screw



Nos. 7485 to 7488 Incl. With Two Screws

Appleton Large Size Squeeze Box Connectors are made of heavy malleable iron, in sizes from ⅜-inch up to 3 inches, to take all sizes of Armored Cable, Flexible Metallic Conduit and Armored Service Entrance Cable. Sizes 1½ to 3 inches are furnished with two screws, providing a double grip on the cable that eliminates any danger of the cable slipping out on short bends. Cadmium finish and provided with the popular Appleton "E-Z-On" locknuts.

Cat. No.	Size In.	Size K.O. In.	Approx. Opening In.	Approx. Closed In.	Diam. of Bushed Hole In.	Wt. Lbs. Std. Pkg.
For 14-2, 14-3, 14-4, 12-2, 12-3, 14-2L. Flexible Steel Conduit 5/16—⅜ inch.						
7265-V	⅜	½	.600	.375	13/32	83

Standard package, 1000; carton quantity, 100.

For 12-4, 10-2, 10-3, 14-3L, 12-2L, 10-2L. Flexible Steel Conduit ⅜-inch.						
***7480-V**	⅜	½	.812	.562	17/32	11

Standard package, 100; carton quantity, 20.

For 10-4, 12-3L, 10-3L, 8-2, 8-3, 8-2L. Flexible Steel Conduit ½-inch.						
***7481-V**	½	½	.937	.812	9/16	15

Standard package, 100; carton quantity, 25.

For 6-2, 6-3, 4-2, 8-3L, 6-3L. Flexible Steel Conduit ¾-inch.						
***7482-V**	¾	¾	1.125	1.000	¾	21

Standard package, 100: carton quantity, 25.

For Flexible Steel Conduit 1-inch.						
7483	1	1	1.406	1.250	1	7

Standard package, 20; carton quantity, 5.

For Flexible Steel Conduit 1¼-inch.						
7484	1¼	1¼	1.656	1.500	1¼	5

Standard package, 10; carton quantity, 5.

For Flexible Steel Conduit 1½-inch.						
7485	1½	1½	1.875	1.688	1½	7

Standard package, 10; carton quantity, 5.

For Flexible Steel Conduit 2-inch.						
7486	2	2	2.500	2.313	2	11

Standard package, 10; carton quantity, 5.

For Flexible Steel Conduit 2½-inch.						
7487	2½	2½	3.000	2.813	2½	9

Standard package, 5; carton quantity, 1.

For Flexible Steel Conduit 3-inch.						
7488	3	3	3.563	3.313	3	11

Standard package, 5; carton quantity, 1.

*With Peek-holes for Anti-short Bushing.

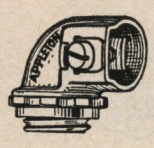
Schedule "BC" Discounts

APPLETON BOX CONNECTORS

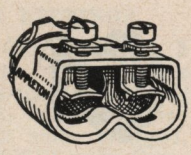
For Flexible Steel Conduit and Armored Cable



45° Connector



90° Connector



No. 7240-V

45-Degree Angle Box Connectors

Cat. No.	Size In.	Size K.O.	Approx. Opening Inches	Approx. Diam. Closed Bushed Hole	Std. Pkg.	Car- ton	Pkg. Wt.
For 14-2, 14-3, 14-4, 12-2, 12-3, 12-4, 10-2, 14-2L, 12-2L. Flexible Steel Conduit 5/16—⅜ inch.							
7233-V	⅜	½	.625	.375	13/32	100	50	10
For 10-4, 8-2, 8-3, 12-3L, 10-3L, 8-2L. FlexibleSteel Conduit ½ inch.							
7234-V	½	½	.937	.687	½	100	50	17

90-Degree Angle Box Connectors

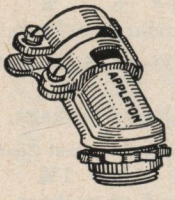
For 14-2, 14-3, 14-4, 12-2, 12-3, 12-4, 10-2, 14-2L, 12-2L. Flexible Steel Conduit 5/16—⅜ inch.								
7235-V	⅜	½	.625	.375	13/32	100	50	12
For 10-4, 8-2, 8-3, 12-3L, 10-3L, 8-2L Flexible Steel Conduit ½ inch.								
7236-V	½	½	.937	.687	½	100	25	26
For 10-4, 8-2, 8-3, 8-4, 6-2, 6-3, 8-2L, 8-3L, 6-2L Flexible Steel Conduit ¾ inch.								
7237-V	¾	¾	1.093	.750	¾	40	20	10½

Duplex Connector—With Clamp

For 14-2, 14-3, 14-4, 12-2, 12-3, 12-4, 10-2, 14-2L, 12-2L.								
7240-V	⅜	½	.625	.375	13/32	100	50	19



No. 7245-V



Nos. 7246-V, 7247-V

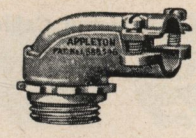
45 Degree Angle Box Connectors

Cat. No.	Size In.	Size K.O.	Approx. Opening Inches	Approx. Diam. Closed Bushed Hole	Std. Pkg.	Car- ton	Pkg. Wt.
For 14-2, 14-3, 14-4, 12-2, 12-3, 12-4, 10-2, 14-2L, 14-3L, 12-2L. Flexible Steel Conduit 5/16—⅜ inch.							
7245-V	⅜	½	.656	.375	17/32	100	50	16
For 8-2, 8-3, 8-2L. Flexible Steel Conduit ½ inch.							
7246-V	½	½	.937	.812	9/16	100	25	24
For 6-2, 6-3, 4-2, 6-3L, 8-3L. Flexible Steel Conduit ¾ inch.							
7247-V	¾	¾	1.125	1.000	13/16	40	10	18

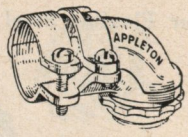
Schedule "BC" Discounts

APPLETON BOX CONNECTORS

For Flexible Steel Conduit and Armored Cable



No. 7380-V
Pat. 1,888,546



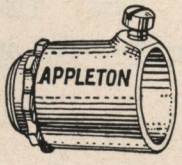
Nos. 7381-V to 7386, Inclusive

90-Degree Angle Box Connectors

Cat. No.	Size In.	Size K.O.	Approx. Opening Inches	Approx. Diam. Closed Bushed Hole	Std. Pkg.	Car- ton	Pkg. Wt.
For 14-2, 14-3, 14-4, 12-2, 12-3, 12-4, 10-2, 14-2L, 14-3L, 12-2L. Flexible Steel Conduit 5/16—⅜ inch.							
7380-V	⅜	½	.656	.406	17/32	100	50	16
For 8-2, 8-3, 8-2L, 8-3L Flexible Steel Conduit ½ inch.							
7381-V	½	½	.937	.812	9/16	100	25	26
For 6-2, 6-3, 4-2, 6-3L, 8-3L Flexible Steel Conduit ¾ inch.							
7382-V	¾	¾	1.125	1.000	13/16	100	25	26
For Flexible Steel Conduit 1 inch.							
7383	1	1	1.406	1.250	1	20	5	20
For Flexible Steel Conduit 1¼ inch.							
7384	1¼	1¼	1.687	1.500	1⅛	10	5	11
For Flexible Steel Conduit 1½ inch.							
7385	1½	1½	1.875	1.688	1 7/16	10	5	17
For Flexible Steel Conduit 2 inch.							
7386	2	2	2.500	2.313	2	5	1	15

SET SCREW CONNECTORS

For Flexible Steel Conduit



No. 7251

These connectors are the regular set-screw type and hold the Flexible Steel Conduit very securely.

Cat. No.	Size In.	Size K.O.	Approx. Opening Inches	Approx. Diam. Closed Bushed Hole	Std. Pkg.	Car- ton	Pkg. Wt.
7251	½	½	.938	.750	⅝	100	20	27

Schedule "BC" Discounts

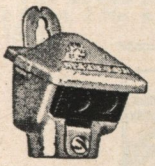
APPLETON ENTRANCE FITTINGS



For use with Oval and Round Bare Neutral Concentric Service Entrance Cable and also Round Armored Service Entrance Cable.

Diameter of Opening for Cable: Minimum, $\frac{5}{16}$x$\frac{3}{4}$ inches; Maximum, $\frac{11}{16}$x$\frac{3}{4}$ inches.

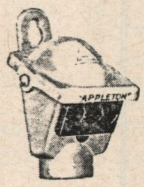
Cat. No. Alumi-num	Size Cable Ins. Cond.	Bare Neutral	Under-writers' Type of Cable	Std. Pkg.	Car-ton	Price Sched-ule
OF-1	2-10	1-10	SEA or SEU (Oval)	40	10	"OF"
	2-8	1-8				



For use with Oval and Round Bare Neutral Concentric Service Entrance Cable and also Round Armored Service Entrance Cable.

Diameter of Opening for Cable: Minimum, $\frac{7}{16}$x1$\frac{3}{32}$ inches; Maximum, $\frac{3}{4}$x1$\frac{3}{32}$ inches.

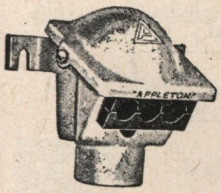
Cat. No. Alumi-num	Size Cable Ins. Cond.	Bare Neutral	Under-writers' Type of Cable	Std. Pkg.	Car-ton	Price Sched-ule
OF-2	2-4	1-4	SEA or SEU (Oval)	40	10	"OF"
	2-6	1-6				



For use with Oval and Round Bare Neutral Concentric Service Entrance Cable and also Round Armored Service Entrance Cable.

Diameter of Opening for Cable: Minimum, $\frac{5}{8}$-$\frac{7}{8}$ inch; Maximum, $\frac{13}{16}$x1$\frac{1}{8}$ inch.

Cat. No. Alumi-num	Size Cable Ins. Cond.	Bare Neutral	Under-writers' Type of Cable	Std. Pkg.	Car-ton	Price Sched-ule
	2-12	1-12				
15205	2-10	1-12	ASE	50	5	"OF"
	2-10	1-10				
	2- 8	1- 8				



For use with Oval and Round Base Neutral Concentric Ser vice Entrance Cable and also Round Armored Service Entrance Cable.

Diameter of Opening for Cable: Minimum, $\frac{19}{32}$ inch; Maximum, 1$\frac{3}{32}$ inches.

Cat. No. Alumi-num	Size Cable Ins. Cond.	Bare Neutral	Under-writers' Type of Cable	Std. Pkg.	Car-ton	Price Sched-ule
	2-6	1-8				
	2-6	1-6				
15206	2-4	1-6	ASE	5	2	"OF"
	2-4	1-4				
	2-2	1-2				

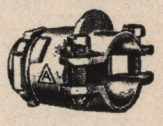
APPLETON BOX CONNECTORS

Malleable Iron, Cadmium Finish

NON-WATERTIGHT CONNECTORS



No. 7285-V



No. 7288-V

Fits ½-inch K.O. or Threaded Fitting

Cat. No.	Opening For Cable Trade Size	Max. I.D.	Min. I.D.	Wire Throat	Size Cable Ins. Cond.	Bare Neu.	Under-writers' Type of Cable	Price Sched-ule
					1-14	1-14		
					1-12	1-12	SE	
7285-V	⅜	⅝	¼	$\frac{7}{16}$	2-12	1-12	and	"OF"
					1-10	1-10	SD	
					2-10	1-10		
					1- 8	1- 8		

Fits ¾-inch K.O. or Threaded Fittings

					1- 6	1- 6	SE	
					1- 4	1- 6	and	
7288-V	½	$\frac{13}{16}$	½	¾	1- 4	1- 4	SD	"OF"
					2-12	1-12	ASE	
					2-10	1-12	ASE	
					2-10	1-10	ASE	

Standard package: No. 7285-V, 1000; No. 7288-V, 100. Carton quantity: No. 7285-V, 500; No. 7288-V, 20.



No. 15233

Fits ¾-inch K.O. or Threaded Fitting

Cat. No.	Opening For Cable Trade Size	Max. I.D.	Min. I.D.	Wire Throat	Size Cable Ins. Cond.	Bare Neu.	Under-writers' Type of Cable	Price Sched-ule
					2- 8	1-10		
					2- 8	1- 8		
					1- 8	1-10		
					1- 8	1- 8		
					1- 6	1- 8		
					1- 6	1- 6	SE	
15233	¾	$\frac{11}{16}$	$\frac{7}{16}$	$\frac{11}{16}$	1- 4	1- 6	and	"OF"
					1- 4	1- 4	SD	
					1- 2	1- 4		
					1- 2	1- 2		
					1- 1	1- 1		
					2-12	1-12	ASE	
					2-14		USE	
					3-14		USE	

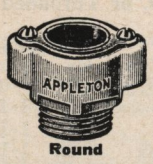
Fits 1-inch K.O. or Threaded Fitting

					1-2	1-4		
					1-2	1-2		
					1-1	1-1		
15234	1	1$\frac{1}{16}$	$\frac{7}{16}$	1	2-6	1-8	SE	"OF"
					2-6	1-6		
					2-4	1-6		
					2-4	1-4		

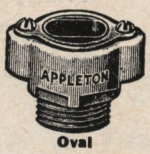
Standard package: No. 15233, 50; No. 15234, 20. Carton quantity: No. 15233, 25; No. 15234, 10.

APPLETON WATERTIGHT CONNECTORS

TWO-SCREW AND NUT TYPES

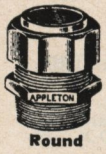


Round



Oval

TWO-SCREW TYPE† Pat. No. 2,170,393



Round



Oval

NUT TYPE‡

Two-Screw Type†	Nut Type‡	DESCRIPTION							
				SIZE OF CABLE					
Cat. No.	Cat. No.	Size Inches	Size of Opening For Cable	Insulated Cond.	Bare Neutral	Underwriter's Type of Cable	Std. Pkge.	Carton Quantity
2075A	1075A	¾″	Round 7/16″	1—12 1—10 1—8 1—8	1—12 1—10 1—10 1—8	SE SE SD SD	100	10
2100B	1100B	1″	Round 7/16″	1—12 1—10 1—8 1—8	1—12 1—10 1—10 1—8	SE SE SD SD	100	10
2075C	1075C	¾″	Round 15/32″	1—8 1—8 1—6 1—6	1—10 1—8 1—8 1—6	SE SE SD SD	100	10
2100D	1100D	1″	Round 15/32″	1—8 1—8 1—6 1—6	1—10 1—8 1—8 1—6	SE SE SD SD	100	10
2075E	1075E	¾″	Round 9/16″	1—6 1—6 1—4	1—8 1—6 1—6	SE SD SD	100	10
2075F	1075F	¾″	Oval 17/32″x25/32″	2—10 2—8 2—8	1—10 1—10 1—8	SE SE & SD SD	100	10
2100G	1100G	1″	Oval 17/32″x25/32″	2—10 2—8 2—8	1—10 1—10 1—8	SE SE & SD SD	100	10
2100H	1100H	1″	Oval 5/8″x7/8″	2—8 2—6 2—6	1—8 1—8 1—6	SE SE & SD SE & SD	100	10
2100J	1100J	1″	Oval 11/16″x63/64″	2—4 2—4	1—6 1—4	SE & SD SE & SD	100	10
.....	1125K	1¼″	Oval 13/16″x1⅛″	2—2 2—2	1—4 1—2	SE & SD SE & SD	50	5

†Made from non-ferrous metal—will not rust. ‡Malleable Iron, Cadmium Finish.

APPLETON CONDUIT FITTINGS
APPLETON UNIVERSAL CABLE CLAMPS



No. 15275



Nos. 15276, 15277

Cat. No.	Malleable Iron‡ Wt. Lbs. Per 100	Price Schedule	Std. Pkg.	Carton
Fits Service Entrance Cable: 2 No. 12, 2 No. 10, 2 No. 8, 2 No. 6, 1 No. 8 and 1 No. 10, 1 No. 6, 1 No. 8, 3 No. 12.				
15275	3	"OF"	100	100
Fits Service Entrance Cable: 2 No. 4, 1 No. 4 and 1 No. 6, 3 No. 10, 2 No. 10 and 1 No. 12, 3 No. 8, 2 No. 8 and 1 No. 10, 3 No. 6, 2 No. 6 and 1 No. 8.				
15276	4½	"OF"	100	100
Fits Service Entrance Cable: 2 No. 2, 1 No. 2 and 1 No. 4, 3 No. 4, 2 No. 4 and 1 No. 6, 3 No. 2, 2 No. 2 and 1 No. 4.				
15277	6	"OF"	100	100

ONE-SCREW CABLE CLAMPS‡



For Round Shaped Cable



For Oval Shaped Cable

For Round Shaped Cable

Cat. No.	For Type SE Cable	For Type SD Cable	Price Schedule
15290	2 No. 12 2 No. 10 1 No. 10 1 No. 12	2 No. 10, 2 No. 8	"OF"
15291	2 No. 8, 1 No. 8 1 No. 10, 1 No. 6 1 No. 8, 2 No. 6	2 No. 6, 2 No. 4	"OF"
15242	2 No. 4, 2 No. 2	2 No. 2.....	"OF"
15243	5 No. 6 (4 insulated, 1 bare) Style ABN		"OF"

For Oval Shaped Cable

15293	3 No. 12 3 No. 10 2 No. 10 1 No. 12	3 No. 8, 2 No. 8 and 1 No. 12	"OF"
15240	3 No. 8 2 No. 8 1 No. 10.....	3 No. 6, 2 No. 6 and 1 No. 8	"OF"
15241	3 No. 6 3 No. 4 2 No. 6 1 No. 8	2 No. 4, 1 No. 6	"OF"
15295	3 No. 2.....	3 No. 2.....	"OF"

Standard package, 100; carton, 100.

COMPOSITION COVERS FOR APPLETON ENTRANCE FITTINGS



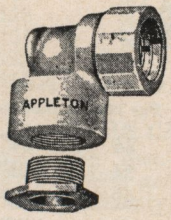
Used on Oval and Round Service Entrance Cable

Cat. No.	Fit Cat. Nos.	Style	Std. Pkg.	Carton	Price Schedule
OF-1C	OF-1	2 Hole	50	10	"OF"
OF-2C	OF-2	2 Hole	50	10	"OF"
15502	15205	3 Hole	50	10	"OF"
15503	15206	3 Hole	10	5	"OF"
15506	15202	2 Hole	10	10	"OF"

‡Malleable Iron, Cadmium Finish.

APPLETON CONDUIT FITTINGS
Cadmium Finish
For Use with Rigid Conduit (Heavy-Wall)
90 DEGREE KNOCKOUT BOX CONNECTORS

COMBINATION THREADED AND NO-THREAD WIRE

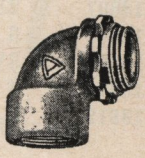


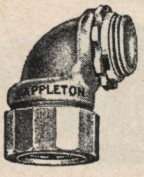
Cat. No.	Threaded	No-thread	Std. Pkg.	Pkg. Wt. Lbs.	Price Schedule
7370	½	½	25	12	"CF"
7371	½	¾	10	5	"CF"
7372	¾	½	10	5	"CF"
7373	¾	¾	10	7	"CF"
7374	¾	1	10	7	"CF"
7375	1	¾	10	7	"CF"

Carton quantity, 5.

THREADED TYPE

Cat. No.	Size In.	Carton	Std. Pkg.	Pkg. Wt. Lbs.	Price Schedule
7390	½	25	50	8½	"CF"
7391	¾	25	50	13	"CF"





NO-THREAD TYPE

Cat. No.	Size In.	Carton	Std. Pkg.	Pkg. Wt. Lbs.	Price Schedule
73N90	½	25	50	10	"CF"
73N91	¾	10	50	16	"CF"

TYPE "PEL" PULLING ELBOWS
For Use with Rigid Conduit (Heavy-Wall)

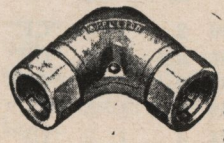
Designed for use in practically any corner, and the cover, which is instantly accessible, makes it possible to pull wires without difficulty. All sizes have exceedingly large wiring space.

Type "PEL" Pulling Elbow—Threaded

Cat. No.	Size In.	Carton	Std. Pkg.	Pkg. Wt. Lbs.	Price Schedule
37450	½	10	100	52	"CF"
37451	¾	5	50	40	"CF"
37452	1	5	20	27	"CF"



Type "PEL" Pulling Elbow—No-Thread



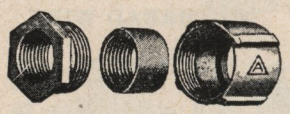
Cat. No.	Size In.	Carton	Std. Pkg.	Pkg. Wt. Lbs.	Price Schedule
374N50	½	10	100	62	"CF"
374N51	¾	5	50	48	"CF"
374N52	1	5	20	34	"CF"

APPLETON CONDUIT FITTINGS

Cadmium Finish

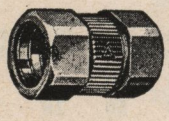
For Use With Rigid Conduit (Heavy-Wall)

"ECONOMICAL" CONDUIT COUPLINGS

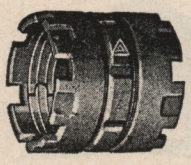


Cat. No.	Size Inches	Carton	Std. Pkg.	Wt. Lbs. Per 100	Price Schedule
18801	½	25	100	24	"CF"
18802	¾	10	40	34	"CF"
18803	1	5	20	52	"CF"
18804	1¼	5	20	92	"CF"
18805	1½	5	20	116	"CF"
18806	2	5	20	195	"CF"
18807	2½	5	10	380	"CF"
18808	3	5	10	420	"CF"
18809	3½	2	5	520	"CF"
18810	4	2	5	620	"CF"
18812	5	1	2	900	"CF"

NO-THREAD COUPLINGS



½ to 2-Inch



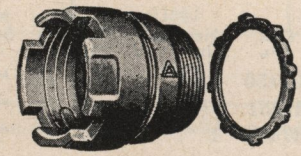
2½ to 4-Inch

Cat. No.	Size In.	Carton	Std. Pkg.	Price Schedule	Cat. No.	Size In.	Carton	Std. Pkg.	Price Schedule
82N80	½	25	100	"CF"	82N96	2	1	5	"CF"
82N81	¾	10	40	"CF"	82N90	2½	1	5	"CF"
82N82	1	5	20	"CF"	82N91	3	1	5	"CF"
82N83	1¼	5	20	"CF"	82N92	3½	1	5	"CF"
82N84	1½	2	10	"CF"	82N93	4	1	5	"CF"

TYPE L NO-THREAD CONNECTORS



½ to 2-Inch



2½ to 4-Inch

Cat. No.	Size In.	Carton	Std. Pkg.	Price Schedule	Cat. No.	Size In.	Carton	Std. Pkg.	Price Schedule
80N95	½	25	100	"CF"	80N90	2	1	5	"CF"
80N96	¾	10	40	"CF"	80N91	2½	1	5	"CF"
80N97	1	5	20	"CF"	80N92	3	1	5	"CF"
80N98	1¼	5	20	"CF"	80N93	3½	1	5	"CF"
80N99	1½	2	10	"CF"	80N94	4	1	5	"CF"

APPLETON CONDUIT FITTINGS

Cadmium Finish

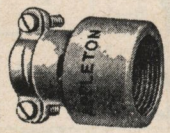
For Use With Rigid Conduit (Heavy-Wall)

TYPE CN NO-THREAD CONNECTORS



Cat. No.	Size Inches	Carton	Std. Pkg.	Wt. Lbs. Per 100	Price Schedule
80N20	½	25	100	17	"CF"
80N21	¾	10	40	12	"CF"
80N22	1	5	20	11	"CF"
80N23	1¼	5	10	19	"CF"

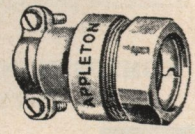
COMBINATION THREADED COUPLINGS



For connecting Flexible Steel Conduit or Armored Bushed Cable to Rigid Conduit.

Cat. No.	Size Inches	Designed to Hold		Max. Dia. Hole	Carton	Std. Pkg.	Pkg. Wt. Lbs.	Price Schedule
18839	½	⅜"	BX	...	10	40	6	"CF"
18840	½	½"	Flex.	$\frac{15}{16}$	10	40	7	"CF"
18841	¾	¾"	Flex.	1⅛	10	40	11	"CF"
18842	1	1"	Flex.	$1\frac{13}{32}$	5	20	7	"CF"
18843	1¼	1¼"	Flex.	$1\frac{11}{16}$	5	20	8	"CF"
18844	1½	1½"	Flex.	2	5	20	15	"CF"
18845	2	2"	Flex.	$2\frac{15}{32}$	5	10	9	"CF"

COMBINATION NO-THREAD COUPLINGS



For connecting Flexible Steel Conduit or Armored Bushed Cable to Rigid Conduit.

Cat. No.	Size Inches	Designed to Hold		Max. Dia. Hole	Carton	Std. Pkg.	Pkg. Wt. Lbs.	Price Schedule
18849	½	⅜"	BX	...	10	40	8	"CF"
18850	½	½"	Flex.	$\frac{15}{16}$	10	40	9	"CF"
18851	¾	¾"	Flex.	1⅛	10	40	12	"CF"

APPLETON CONDUIT FITTINGS

Cadmium Finish



ONE-SCREW MALLEABLE CLAMPS

For Rigid Conduit (Heavy-Wall)

Cat. No.	Size Inches	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Schedule
17149	⅜	100	100	3	"CF"
17148	¼	100	100	3	"CF"
17150	½	100	100	11	"CF"
17151	¾	100	100	13	"CF"
17152	1	100	100	21	"CF"
17153	1¼	10	40	14	"CF"
17154	1½	10	40	16	"CF"
17155	2	5	20	14	"CF"
17156	2½	5	20	25	"CF"
17157	3	5	20	36	"CF"
17158	3½	5	10	24	"CF"
17159	4	5	10	29	"CF"

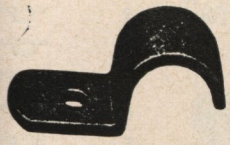
CLAMP BACKS FOR ONE-SCREW CLAMPS

For Rigid Conduit (Heavy-Wall) and Electrical Metallic Tubing



Clamp-Backs are used under pipe clamps to raise the conduit from surface and prevent moisture accumulation around pipe. Also allow conduits to run into hubs and knockouts of boxes in straight line.

Clamp Back Cat. No.	Will Take Clamp — For Rigid Conduit	For E.M.T.	Carton	Std. Pkg.	Pkg. Wt. Lbs.	Price Schedule
27148	17148 17149	171T49	100	100	6	"CF"
27150	17150	171T50 171T51	100	100	10	"CF"
27151	17151	171T52	100	100	10	"CF"
27152	17152	171T53	100	100	15	"CF"
27153	17153	171T54	10	40	10	"CF"
27154	17154	171T55	10	40	12	"CF"
27155	17155	.....	5	20	8	"CF"
27156	17156	.....	5	20	8	"CF"
27157	17157	.....	5	20	16	"CF"
27158	17158	.....	5	10	..	"CF"
27159	17159	.....	5	10	..	"CF"



ONE-SCREW HEAVY STAMPED STEEL CLAMPS

For Rigid Conduit (Heavy-Wall)

Cat. No.	Size Inches	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Schedule
17248	¼	100	500	9	"CF"
17249	⅜	100	500	9	"CF"
17250	½	100	100	11	"CF"
17251	¾	100	100	12	"CF"
17252	1	100	100	23	"CF"
17253	1¼	10	40	14	"CF"
17254	1½	10	40	20	"CF"
17255	2	5	20	16	"CF"
17256	2½	5	20	16	"CF"
17257	3	5	10	14	"CF"
17258	3½	5	10	18	"CF"
17259	4	5	10	22	"CF"

APPLETON CONDUIT FITTINGS

Cadmium Finish



ONE-SCREW STEEL CLAMPS

For Rigid Conduit (Heavy-Wall)

Cat. No.	Size Inches	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Schedule
7148	¼	100	100	3	"CF"
7149	⅜	100	100	3	"CF"
7150	½	100	100	5	"CF"
7151	¾	100	100	8	"CF"
7152	1	100	100	9	"CF"
7153	1¼	10	40	7	"CF"

E-Z-IN CABLE STAPLES

Will take Nos. 14W2, 14W3, 12W2, 12W3, 10W2, and 10W3 armored cable. Plain finish only.

For Non-Metallic & Plastic-Insulated



Cat. No.	Lgth. In.	Quantity Lots	Wt. Lbs. Per 5000	Price Schedule
8063	⅞	‡‡	43	"CF"
8064	1⅛	‡‡	54	"CF"
8065	1⅜	‡‡	65	"CF"

‡‡30,000, 10,000, 5,000.

CABLE CLIP

For Armored Cable, Non-Metallic Sheathed Cable and "CNX" Cable



Made of terne plate steel, which has superior rust-resisting qualities. The little impressions firmly hold the cable in place without injury and the spur anchors the clip in place.

Fastening hole in Clip, $\frac{3}{16}$-inch in diameter.

Cat. No.	Fits Cable	Price Schedule
8066	14W2, 12W2, 10W2, 14W3, 12W3	"CF"

Average, 110 Clips to a pound. Standard package, 1000; carton quantity, 500. Weight per 1,000, 9 lbs.

ONE-SCREW CLAMP

For ¼-inch pipe and ⅜-inch armored conductor.



Cat. No.	Size In.	Std. Pkg.	Pkg. Wt. Lbs.	Price Schedule
7145	¼	500	9	"CF"

ONE-HOLE STRAP FOR NON-METALLIC SHEATHED CABLE



Made of lead-coated, rust-resisting Terne plate steel. More durable, yet lighter in weight.

Cat. No.	Fits Cable	Carton	Price Schedule
7146	14-2, 12-2, 10-2.....	*	"CF"

TWO-HOLE STRAP FOR NON-METALLIC SHEATHED CABLE

Made of steel.



Cat. No.	Fits Cable	Carton	Price Schedule
†8067	14-2, 12-2, 10-2.....	*	"CF"

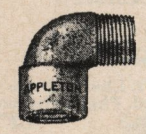
*Packed in 5, 10 or 25 lb. cartons, or Bulk in 50 lb. bags.

†Average, 77 straps to a pound.

APPLETON CONDUIT FITTINGS

Cadmium Finish

90-DEGREE BUSHED ELBOWS—SHORT



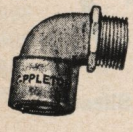
Cat. No.	Size In.	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Schedule
7495	½	25	100	16	"CF"
7496	¾	25	100	26	"CF"
7497	1	10	40	15	"CF"

90-DEGREE BUSHED ELBOWS—LONG



Cat. No.	Size In.	Carton	Std. Pkg.	Pkg. Wt. Lbs.	Price Schedule
7490	½	25	100	30	"CF"
7491	¾	25	100	50	"CF"
7492	1	5	20	16	"CF"
7493	1¼	5	20	26	"CF"
7494	1½	5	10	24	"CF"
7494-A	2	5	10	38	"CF"

90-DEGREE ANGLE CONNECTOR EXTENSION



Cat. No.	Size In.	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Schedule
27495	½	25	100	16	"CF"
27496	¾	25	100	26	"CF"
27497	1	10	40	15	"CF"

REDUCERS

Used to reduce Conduit Fittings from larger to smaller sizes as shown in listing.



Cat. No.	Size Inches	Carton	Std. Pkg.	Wt. Lbs. Per 100	Price Schedule
RB50-38	½ to ⅜	50	100	4	"CF"
RB75-50	¾ to ½	50	100	5	"CF"
1 to ½ RB100-50		25	100	12	"CF"
RB125-50	1¼ to ½	25	100	33	"CF"
RB150-50	1½ to ½	25	50	40	"CF"
RB200-50	2 to ½	5	25	65	"CF"
RB100-75	1 to ¾	25	100	9	"CF"
RB125-75	1¼ to ¾	25	100	24	"CF"
RB150-75	1½ to ¾	25	50	36	"CF"
RB200-75	2 to ¾	5	25	70	"CF"
RB125-100	1¼ to 1	25	100	14	"CF"
RB150-100	1½ to 1	25	50	29	"CF"
RB200-100	2 to 1	5	25	52	"CF"
RB150-125	1½ to 1¼	25	50	15	"CF"
RB200-125	2 to 1¼	5	25	50	"CF"
RB200-150	2 to 1½	5	25	38	"CF"
RB250-150	2½ to 1½	5	25	87	"CF"
RB300-150	3 to 1½	5	25	125	"CF"
RB250-200	2½ to 2	5	25	53	"CF"
RB300-200	3 to 2	5	25	130	"CF"
RB300-250	3 to 2½	5	25	100	"CF"
RB350-250	3½ to 2½	5	10	200	"CF"
RB400-250	4 to 2½	2	10	263	"CF"
RB350-300	3½ to 3	5	10	93	"CF"
RB400-300	4 to 3	2	10	250	"CF"
RB400-350	4 to 3½	2	10	200	"CF"

APPLETON CONDUIT FITTINGS

Cadmium Finish

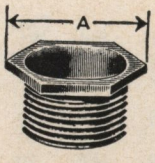
CUPPED REDUCING WASHERS



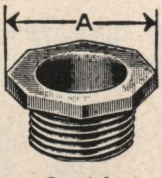
A practical fitting for reducing the knockouts in outlet boxes, cabinets, etc. Galvanized finish.

Cat. No.	Size Inches	Carton	Std. Pkg.	Wt. Lbs. Per 100	Price Schedule
7336	¾ to ½	250	500	2	"CF"
7337	1 to ¾	125	250	3	"CF"
7338	1 to ½	125	250	4	"CF"
7339	1¼ to 1	125	250	5	"CF"
7340	1¼ to ¾	125	250	6	"CF"
7341	1¼ to ½	125	250	7	"CF"
7342	1½ to 1¼	50	100	7	"CF"
7343	1½ to 1	50	100	8	"CF"
7344	1½ to ¾	50	100	9	"CF"
7345	1½ to ½	50	100	10	"CF"
7346	2 to 1½	50	100	5	"CF"
7347	2 to 1¼	50	100	6	"CF"
7348	2 to 1	50	100	7	"CF"
7349	2 to ¾	50	100	8	"CF"
7350	2 to ½	50	100	9	"CF"

CONDUIT NIPPLES



Regular



Special

Regular Conduit Nipples

Cat. No.	Size Inches	Dimens. "A"	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Schedule
7200	⅜	13/16	50	100	3	"CF"
7201	½	1	50	100	4	"CF"
7202	¾	1 5/16	50	100	8	"CF"
7203	1	1 11/16	10	40	6	"CF"
7115	1¼	2⅛	5	20	5	"CF"
7116	1½	2 5/16	5	20	6	"CF"
7117	2	2⅞	5	10	5	"CF"
7118	2½	3½	5	10	6½	"CF"
7119	3	4⅜	1	5	5	"CF"
7120	3½	4⅝	1	5	6½	"CF"
7121	4	5 3/16	1	5	7½	"CF"
7123	5	6 5/16	1	5	10½	"CF"

Special Conduit Nipples

7125	½	1¼	50	100	5	"CF"
7126	¾	1⅜	50	100	9	"CF"

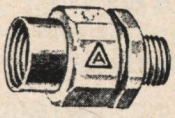
APPLETON CONDUIT FITTINGS

Cadmium Finish

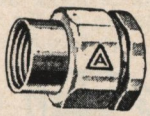
For Use With Rigid Conduit (Heavy-Wall)

MALE AND FEMALE UNIONS

For Use in Non-Hazardous Locations



Male Union



Female Union

Male Unions

Cat. No.	Size In.	Diam., In. Lgth.	Diam., In. Diam.	Carton	Std. Pkg.	Pkg. Wt. Lbs.	Price Schedule
37460	½	2 5/32	1 1/16	10	50	25	"CF"
37461	¾ to ½†	2 1/16	1 1/16	10	50	27	"CF"
37462	¾	2 1/16	1 1/16	10	50	23	"CF"
37463	1	2 31/64	1 7/8	5	25	17	"CF"
37464	1¼	3	2 5/16	5	25	26	"CF"
37465	1½	3⅛	2 11/16	5	25	37	"CF"
37466	2	3¾	3 3/32	2	10	21	"CF"
37467	2½	4⅝	4⅞	2	10	35	"CF"
37468	3	4¾	5⅜	1	5	19	"CF"

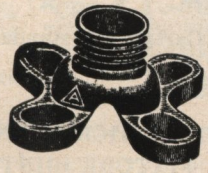
Female Unions

37470	½	1 11/16	1 1/16	10	50	21	"CF"
37471	¾ to ½†	1 11/16	1 1/16	10	50	23	"CF"
37472	¾	1 11/16	1 1/16	10	50	19	"CF"
37473	1	1⅞	1⅞	5	25	14	"CF"
37474	1¼	2 5/32	2 5/16	5	25	23	"CF"
37475	1½	2 9/32	2 11/16	5	25	35	"CF"
37476	2	2 13/32	3 3/32	2	10	18	"CF"
37477	2½	3⅜	4⅞	2	10	32	"CF"
37478	3	3⅜	5⅜	1	5	16	"CF"

†End at right in illustration is for ¾-inch conduit.

HICKEY FIXTURE STEMS

WITHOUT BOLTS



Cat. No.	Size Inches	Material	Carton	Pkg. Pkg.	Pkg. Wt. Lbs.	Price Schedule
8050	⅜	Malleable ..	100	1000	76	"CF"
8090	⅜	Steel	100	1000	75	"CF"
8091	⅜M-⅛F	Steel	100	1000	75	"CF"
8052	½	Malleable ..	100	500	55	"CF"

APPLETON CONDUIT FITTINGS

Cadmium Finish

BOLTLESS FIXTURE STEMS

Cat. No.	Size In.	Carton	Std. Pkg.	Pkg. Wt. Lbs.	Price Schedule
		Solid Type			
8055	⅜	100	1000	72	"CF"
8057	½	100	1000	80	"CF"
		Open Type			
8056	⅜	100	1000	72	"CF"
8058	½	100	1000	80	"CF"
8070	⅜M ⅛F	100	1000	80	"CF"



Malleable

CONDUIT MALE ENLARGERS



These enlargers, when screwed into the hub of any conduit fitting having ½, ¾ or 1-inch female hubs respectively, will enlarge the hub to the next size, namely, ¾, 1 and 1¼ inches according to the number selected.

Cat. No.	Size Inches	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Schedule
9407	¾ F.x ½ M.	50	500	70	"CF"
9408	1 F.x ¾ M.	50	500	80	"CF"
9409	1¼ F.x 1 M.	20	200	40	"CF"

FIXTURE EXTENSION PIECES

⅜-inch Male by ⅜-inch Female



Cat. No.	Lgth. Inches	Carton	Std.‡ Pkg.	Wt. Lbs. Per 1000	Price Schedule
18830	1	100	1000	52	"CF"
18831	1⅜	100	1000	70	"CF"

COMBINATION EXTENSION PIECES





No. 18835 No. 18836

These new extension pieces have internal threads in addition to the standard male thread, so that they may also be used for bracket outlets.

Cat. No.	Size and Description	Carton	Std.‡ Pkg.	Wt. Lbs. Per 1000	Price Schedule
18835	⅜" Female x ⅜" Male, and ⅛" Female—1 inch long	100	1000	52	"CF"
18836	⅜" Female x ⅜" Male, and ⅛" and ¼" Female — 1 inch long	100	1000	50	"CF"

‡Extensions may be assorted to make up standard package quantities.

APPLETON TIGER-GRIP HICKEYS AND COUPLINGS



No. 7290 Hickey

Cadmium Finish

The jaws grip with a set of sharp steel teeth in the lower jaw and do not slip. The coupling attachment strengthens the hold on the handle and prevents breakage. One tool takes care of all sizes of conduit up to and including ¾-inch, and for 1-inch conduit the hickey and sleeve coupling have been combind in one casting.



No. 7291 Hickey

Tiger-Grip with Coupling

Cat. No.	For Conduit Inches	Carton	Std. Pkg.	Wt.Lbs. Std. Pkg.	Price Schedule
7290	½ & ¾	1	10	19	"CF"

Tiger-Grip with Coupling

7291	1	1	10	55	"CF"



No. 7295 Coupling

Sleeve Coupling

7295	½ & ¾	1	10	16	"CF"
7296	Jaws for Tiger-Grip Hickey				"CF"

APPLETON FISH TAPE

Stock lengths of fish tape are 50, 100, 150 and 200 feet. Can be furnished in longer lengths if desired. Put up in coils, packed in cartons.

Unless otherwise specified, 100-ft. lengths will be furnished.

Cat. No.	Size	Price Schedule	Cat. No.	Size	Price Schedule
7130	⅛ x .030	"CF"	7133	⅛ x .060	"CF"
7131	5/32 x .030	"CF"	7134	5/32 x .060	"CF"
7132	¼ x .030	"CF"	7135	¼ x .060	"CF"

APPLETON CONDUIT FITTINGS

Cadmium Finish

For Use with Rigid Conduit (Heavy-Wall)

TYPES EL AND ELB ELBOWS



EL 45-Degree Female



EL 90-Degree Female

Type EL 45-Degree Elbows—Female

Cat. No.	Size In.	Carton	Std. Pkg.	Price Schedule
8285	½	10	200	"CF"
8286	¾	10	100	"CF"
8287	1	5	50	"CF"

Type EL 90-Degree Elbows—Female

8270	½	10	200	"CF"
8271	¾	10	100	"CF"

APPLETON CONDUIT FITTINGS

Cadmium Finish

For Use with Rigid Conduit (Heavy-Wall)

TYPE EL 90-DEGREE ELBOWS

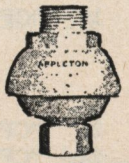


No-Thread

Cat. No.	Size In.	Carton	Wt.Lbs. Std. Pkg.	Wt.Lbs. Std. Pkg.	Price Schedule
82N70	½	5	100	37	"CF"
82N71	¾	5	50	36	"CF"

SWIVEL FIXTURE HANGERS

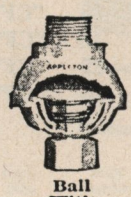
Ball Without Cushion



Ball Without Cushion

Cat. No.	Size Fixture Stem	Size Male Hub	Wt. Fixture Lbs.	Wt.Lbs. Std. Pkg.	Price Schedule
7160	⅜	½	...	33	"CF"
7161	½	½	...	34	"CF"
7162	¾	½	...	35	"CF"
7163	¾	¾	...	36	"CF"

Ball With Cushion



Ball With Cushion

7165	⅜	½	6	40	"CF"
7166	½	½	6	41	"CF"
7167	¾	½	6	42	"CF"
7168	¾	¾	6	43	"CF"
7170	⅜	½	12	40	"CF"
7171	½	½	12	41	"CF"
7172	¾	½	12	42	"CF"
7173	¾	¾	12	43	"CF"
7185	⅜	½	24	41	"CF"
7186	½	½	24	42	"CF"
7187	¾	½	24	43	"CF"
7188	¾	¾	24	44	"CF"

Carton 10; standard package 50.

COMBINATION HICKEY AND SWIVEL FIXTURE JOINT

In addition to the swivel fixture joint feature it also has the added feature of being a hickey and eliminates the use of the ordinary hickey.



Cat. No.	Size Inches	Carton	Std. Pkg.	Wt.Lbs. Std.Pkg.	Price Schedule
7220	⅜-⅜	25	50	14	"CF"
7221	⅜-½	25	50	14	"CF"

APPLETON SPECIAL "REA" CONDUIT FITTINGS
FOR RURAL ELECTRIFICATION WIRING
(Weathertight)

Appleton Special "REA" Conduit Fittings (Weatherproof) have been designed expressly to meet the needs for inexpensive, well-made Lighting Fixtures, Wall Receptacles and Switches (all weathertight) for use in R.E.A. wiring.

For lighting basements, woodsheds, garages, poultry houses, cow-stables, milk houses, shops, pumphouses and numerous other places about the modern, up-to-the-minute farm buildings and yards.

LIGHTWEIGHT LIGHTING FIXTURES



TYPE "RVA"

With Globe, No Guard

Hub at top tapped for ½-inch Rigid Conduit (heavy-wall).

Cat. No.	Size Inch	Watts	Wt. Lbs. Each	Price Schedule
REA-1	½	100	3	"CF"

TYPE "ROB"

With Globe, No Guard



With 4-inch square plate for 4-inch Square or 3¼ and 4-inch Octagonal Outlet Boxes.

Cat. No.	Style Plate	Watts	Wt. Lbs. Each	Price Schedule
REA-2	4" Sq.	100	2 Lbs. 14 Ozs.	"CF"
REA-2R	(Ruby Globe)	100	2 Lbs. 14 Ozs.	"CF"



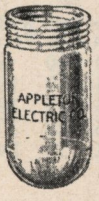
TYPE "RBVA"

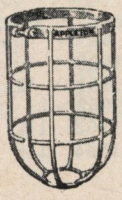
With Globe, No Guard

With bracket for mounting on 3¼ or 4-inch Octagonal Outlet Boxes. Screw holes for 4-inch Octagonal Box and fastening strap for 3¼-inch Octagonal Boxes.

Cat. No.	Size Watts	Wt. Lbs. Each	Price Schedule
REA-20	100	4	"CF"
REA-20 (Ruby)	100	4	"CF"

GLOBE AND GUARD





Globe

Cat. No.	Watts	Wt. Ea.	Price Schedule
REA-33	100	1¼	"CF"
REA-33R (Ruby)	100	1¼	"CF"

Wire Guard

REA-3	100		"CF"

STANDARD DOME REFLECTOR AND HOLDER

When reflector is used, reflector holder clamps onto "RVA" and "ROB" Lighting Fixtures and guard cannot be used.



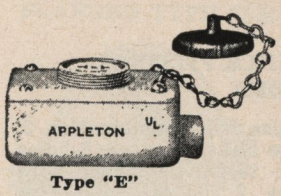
For REA-1 and REA-2

Cat. No.	Watts	Wt. Lbs. Each	Price Schedule
REA-21	100	4	"CF"

All above packed one to a carton.

FLANGED TYPE "REA" ENTRANCE FITTINGS
See Listing, Section 22, Page 2.

APPLETON SPECIAL "REA" CONDUIT FITTINGS
FOR RURAL ELECTRIFICATION WIRING
(Weathertight)
OUTDOOR RECEPTACLE FITTINGS
Complete with Receptacle, Cap and Chain†



Type "E" Type "C"

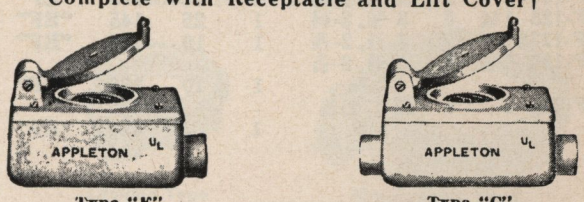
Type E—One ½-Inch Hub

Cat. No.	Style	Amperes 125V.	Amperes 250V.	Wt. Ea. Lbs.	Wt. Ea. Oz.	Price Schedule
REA-4	2-Wire, 2-Pole	15	10	2	11	"CF"
REA-5	2-Wire, 3-Pole	15	10	2	11	"CF"
REA-6	3-Wire, 3-Pole	15	10	2	11	"CF"

Type C—Two ½-Inch Hubs

REA-7	2-Wire, 2-Pole	15	10	2¾	....	"CF"
REA-8	2-Wire, 3-Pole	15	10	2¾	....	"CF"
REA-9	3-Wire, 3-Pole	15	10	2¾	....	"CF"

OUTDOOR RECEPTACLE FITTINGS
Complete with Receptacle and Lift Cover†



Type "E" Type "C"

Type E—One ½-Inch Hub

Cat. No.	Style	Amperes 125V.	Amperes 250V.	Wt. Ea. Lbs.	Wt. Ea. Oz.	Price Schedule
REA-44	2-Wire, 2-Pole	15	10	2	15	"CF"
REA-45	2-Wire, 3-Pole	15	10	2	15	"CF"
REA-46	3-Wire, 3-Pole	15	10	2	15	"CF"

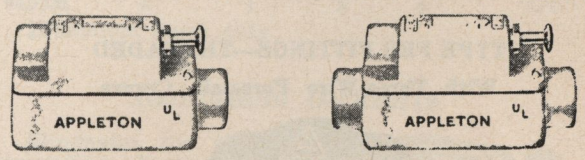
Type C—Two ½-Inch Hubs

REA-47	2-Wire, 2-Pole	15	10	3	....	"CF"
REA-48	2-Wire, 3-Pole	15	10	3	....	"CF"
REA-49	3-Wire, 3-Pole	15	10	3	....	"CF"

†Will take standard attachment plug caps—15 amp., 125 volt or 10 amp., 250 volt.

OUTDOOR SWITCH FITTINGS
Complete with Switches

All Switches except Double Pole are "T" Rated



Type "E" Type "C"

Type E—One ½-Inch Hub

Cat. No.	Style	Amperes 125V.	Amperes 250V.	Wt. Ea. Lbs.	Wt. Ea. Oz.	Price Schedule
REA-10	Single Pole.....	10	5	1	2	"CF"
REA-11	Double Pole....	....	10	1	2	"CF"
REA-12	Three Way.....	10	5	1	2	"CF"
REA-13	Four Way	10	5	1	2	"CF"

Type C—Two ½-Inch Hubs

REA-14	Single Pole.....	10	5	1	3	"CF"
REA-15	Double Pole....	....	10	1	3	"CF"
REA-16	Three Way.....	10	5	1	3	"CF"
REA-17	Four Way	10	5	1	3	"CF"

All above packed one to a carton.

APPLETON ELECTRIC COMPANY

APPLETON ENTRANCE FITTINGS

Cadmium Finish

For Rigid Conduit (Heavy-Wall)

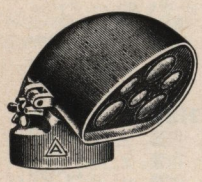
TYPE FEBS ENTRANCE FITTINGS THREADED



½-inch size with Combination 2, 3 and 4-wire Bakelite cover; 2 holes plugged. ¾- to 1¼-inch sizes, with Combination 2, 3, 4 and 5-wire Bakelite covers; 2 holes plugged. 1¼-inch size (F125S) with Combination 4, 5, 6 and 7-wire Composition cover; 3 holes plugged. 1½- and 2-inch sizes, with Combination 2, 3, 4, 5 and 6-wire Bakelite covers, 4 holes plugged.

Cat. No.	Size In.	Holes in Insulator	Size of Holes	Carton	Std. Pkg.	Wt.Lbs. Per 100	Price Schedule
F- 50	½	4	4-$\frac{5}{16}$	10	100	55	"EF"
F- 75	¾	5	3-$\frac{13}{32}$, 2-⅜	10	50	63	"EF"
F-100	1	5	3-½, 2-$\frac{13}{32}$	5	25	105	"EF"
F-125	1¼	5	3-⅝, 2-$\frac{13}{32}$	1	25	145	"EF"
F-125S	1¼	7	5-$\frac{11}{32}$, 2-$\frac{5}{16}$	1	10	145	"EF"
F-150	1½	6	3-$\frac{13}{32}$, 2-$\frac{5}{16}$ 1-⅜	1	10	260	"EF"
F-200	2	6	3-1, 2-¾ 1-$\frac{11}{32}$	1	5	520	"EF"

TYPE FEBR REVERSIBLE FITTINGS THREADED

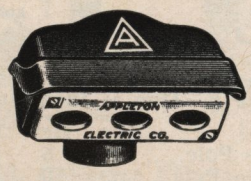


With Combination 2, 3, 4, 5 and 6-wire Composition covers. Reversible type for outside installation.

Cat. No.	Size In.	K.O. in Covers	Size of K.O.	Carton	Std. Pkg.	Wt.Lbs. Each	Price Schedule
F250	2½	6	3-1¾, 3-1⅛	1	1	11½	"EE"
F300	3	6	3-1¾, 3-1⅛	1	1	12½	"EF"
F350	3½	6	3-1¾, 3-1⅛	1	1	13¼	"EF"
F400	4	6	3-1¾, 3-1⅛	1	1	13½	"EF"

TYPE FEB FITTINGS—THREADED

With Three-Wire Porcelain Covers



Can be furnished with four, five, six, seven or eight-wire covers when specified on orders. For example, type FEB for 2½-inch conduit with 4-wire covers.

Cat. No.	Size In.	Carton	Std. Pkg.	Wt. Lbs. Each	Price Schedule
F500	5	1	1	62	"EF"
F600	6	1	1	78	"EF"

APPLETON ENTRANCE FITTINGS

Cadmium Finish

For Rigid Conduit (Heavy-Wall)

TYPE FB FITTINGS—THREADED

With Combination 2, 3 and 4-Wire Composition Covers



Cat. No.	Size In.	Carton	Std. Pkg.	Wt.Lbs. Per 100	Price Schedule
1713	½	10	100	48	"EF"
1714	¾	10	100	56	"EF"
1716	1	5	50	45	"EF"

TYPE FC FITTINGS—THREADED

With Combination 2, 3 and 4-Wire Composition Covers



Cat. No.	Size In.	Carton	Std. Pkg.	Wt.Lbs. Per 100	Price Schedule
1723	½	20	200	17	"EF"
1733	¾	20	200	17	"EF"
1743	1	10	100	44	"EF"

TYPE FCE CABLE END FITTING

With 3-Hole Composition Cover



For use with Armored Cable or Non-metallic Sheathed Cable.

Cat. No.	Size In.	Carton	Std. Pkg.	Wt.Lbs. Per 100	Price Schedule
1755	⅜	25	200	14	"EF"

FCC CONDUIT END FITTING—THREADED

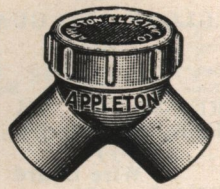
With 3-Hole Composition Cover



Cat. No.	Size In.	Carton	Std. Pkg.	Wt.Lbs. Per 100	Price Schedule
1756	½	25	200	10	"EF"

TYPE AY ANGLE FITTINGS

With Two Threaded Female Hubs

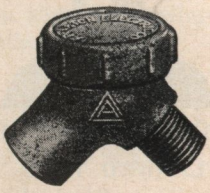


Cat. No.	Size In.	Carton	Std. Pkg.	Wt.Lbs. Per 100	Schedule
1950	½	10	50	84	"EF"
1951	¾	5	50	100	"EF"
1952	1	5	25	108	"EF"
1953	1¼	5	20	135	"EF"
1954	1½	1	10	340	"EF"

TYPE AYM FITTINGS

With Male and Female Threaded Hubs

Designed especially for use with poles used for floodlights and for signs used around gasoline filling stations, etc.



Cat. No.	Size In.	Carton	Std. Pkg.	Wt.Lbs. Per 100	Schedule
11950	½x ½	10	50	84	"EF"
11951	¾x ¾	5	50	100	"EF"
11952	1 x1	5	25	108	"EF"

APPLETON ELECTRIC COMPANY

APPLETON ENTRANCE FITTINGS

Cadmium Finish

For Rigid Conduit (Heavy-Wall)

TYPE SLAY FITTINGS—THREADED†



With Gasket

For service entrance and outside conduit installations. May be installed close to buildings.

Cat. No.	Size In.	Carton	Std. Pkg.	Wt.Lbs. Per 100	Price Schedule
31790	½	10	100	66	"EF"
31791	¾	10	50	84	"EF"
31792	1	5	50	136	"EF"
31793	1¼	5	25	260	"EF"

TYPE SLAY FITTINGS—THREADED†



For Driven Grounds With Gasket

Designed especially for services that are grounded outside of building. Hub in bottom of fitting is for ¾-inch conduit, which should extend far enough to protect ground wire.

Cat. No.	Size Inches	Carton	Std. Pkg.	Wt.Lbs. Per 100	Price Schedule
41791	¾x ¾x¾	10	50	105	"EF"
41792	1 x1 x¾	5	50	151	"EF"
41793	1¼x1¼x¾	5	25	210	"EF"

†Sealing Screws supplied if specified.

TYPE LAY FITTINGS—THREADED

Weatherproof, gasket not required. Cover held in place by flange and securely fastened by screw.



For service entrance and outside conduit installation. May be installed close to buildings.

Cat. No.	Size In.	Carton	Std. Pkg.	Wt.Lbs. Per 100	Schedule
1790	½	10	50	90	"EF"
1791	¾	10	50	94	"EF"
1792	1	5	25	156	"EF"
1793	1¼	5	25	330	"EF"
1794	1½	1	25	400	"EF"
1795	2	1	5	500	"EF"
LAY 250	2½	1	1	1850	"EF"

TYPE LAY FITTINGS—THREADED



For Driven Grounds

Made especially for services that are grounded outside of building. The hub in bottom of fitting is for ½-inch conduit which should extend far enough to protect ground wire.

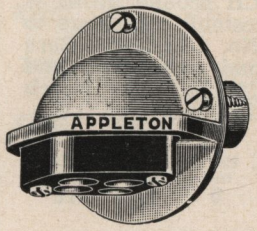
Cat. No.	Size Inches	Carton	Std. Pkg.	Wt.Lbs. Per 100	Price Schedule
11791	¾x ¾x½	10	50	100	"EF"
11792	1 x1 x½	5	50	151	"EF"
11793	1¼x1¼x½	5	10	210	"EF"

APPLETON ENTRANCE FITTINGS

Cadmium Finish

For Rigid Conduit (Heavy Weight)

FLANGED TYPE "REA" ENTRANCE FITTING



Combination entrance cap and flange for out building service entrances as specified by REA.

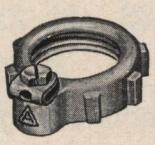
Cat. No.	Carton	Std. Pkg.	Wt. Lbs.	Price Schedule
Without DuxSeal Compound				
REA-25	1	25	20	"EF"
With DuxSeal Compound				
REA-26	1	25	21	"EF"

APPLETON GROUND FITTINGS

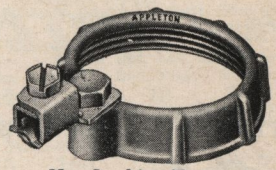
For Grounding Service Wire and Conduit System

Cadmium Finish

GROUNDING BUSHINGS



Locking Type ½" to 2"



Non-Locking Type 2½" to 4"

Locking Type—Malleable

Cat. No.	Size Inches	Carton	Std. Pkg.	Wt.Lbs. St.Pkg.	Price Schedule
9450M	½	50	100	5	"GF"
9451M	¾	50	100	7	"GF"
9452M	1	25	50	5	"GF"
9453M	1¼	25	50	6¼	"GF"
9454M	1½	25	50	7¾	"GF"
9455M	2	10	25	6	"GF"

Non-Locking Type—Malleable‡

9456M	2½	5	10	4¼	"GF"
9457M	3	5	10	6½	"GF"
9458M	3½	1	5	4½	"GF"
9459M	4	1	5	6	"GF"

‡Cadmium finish only.

GROUNDING LOCKNUTS



Eliminates the use of grounding bushing and jumper wire. Used in place of ordinary locknut. The set screw wedges its way between the knockout and conduit, cutting into the steel and forming a perfect bond. Cadmium finish only.

Cat. No.	Size Inches	Std. Pkg.	Wt.Lbs. Std.Pkg.	Price Schedule
9425	½	100	3½	"GF"
9426	¾	100	4	"GF"
9427	1	50	3	"GF"
9428	1¼	50	3	"GF"
9429	1½	50	4	"GF"
9430	2	25	4	"GF"

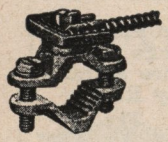
APPLETON GROUND FITTINGS

For Grounding Service Wire and Conduit System

Cadmium Finish

TYPE GCH FITTING

For No. 8 or No. 6 Bare Armored Ground Conductor



The type GCH ground fitting is made with adjustable top clamp to accommodate No. 8 or No. 6 Bare Armored Ground conductor, and for grounding to ½, ¾ or 1-inch water pipe or 1-inch ground rod.

Cat. No.	Size Bare Armored Ground Wire	Size of Water Pipe Inches	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.
9445	8 or 6	½, ¾, 1	5	25	10

TYPE GCWC GROUND FITTING

Type GCWC has deck with a hole drilled to accommodate ground wire. The screw, when tightened, wedges the wire into a cup in the center of fitting, making a good bond and positive grip. Adapted for No. 8, 6 or 4 Bare or Insulated Copper Wire.



Cat. No.	Water Pipe	Ground Rod	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.
9489	½, ¾, 1"	1"	5	25	11

TYPE GCAR ADJUSTABLE GROUND FITTING



This is a very popular ground fitting as it is of the Swivel type and is adjustable. Adapted for No. 8, 6 or 4 B&S Armored ground wire.

Cat. No.	Water Pipe	Ground Rod	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.
9448	½, ¾, 1"	1"	5	25	15

TYPE GCP GROUND FITTING

This malleable clamp will take wires No. 8, 6 or 4 either solid or stranded. The wire fastening device consists of a ⅝-inch bolt with a ¼-inch hole through it. In connecting the wire, put the end of the wire through the hole in the bolt, then tighten the nut and the bolt will clamp the wire.



Cat. No.	Water Pipe	Ground Rod	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.
9491	½, ¾, 1"	1"	5	25	8

TYPE GCNS NON-SWIVEL GROUND FITTING



Non-swivel type, with "V" shaped clamp fits Nos. 8, 6 or 4 B&S Armored Ground Wire and takes ½ to 1-inch Water Pipe or 1-inch Ground Rod. May also be used with Nos. 8, 6 or 4 Bare or Insulated Copper Wire.

Cat. No.	Size Grounding Water Pipe	Size Grounding Ground Rod	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.
9493	½, ¾, 1"	1"	5	25	7½

Schedule "GF" Discounts

APPLETON GROUND FITTINGS

For Grounding Service Wire and Conduit System

Cadmium Finish

TYPE GCIC WITH TITE-GRIP CONTACTS



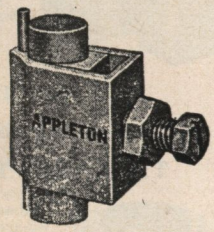
For 8, 6 or 4 Bare or Insulated Copper Wire. Furnished with Tite-grip contacts and will not injure the copper ground wire. Has a heavy screw through the center of the clamping member that forms a positive contact when tightened.

Cat. No.	Water Pipe	Ground Rod	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.
9446	½, ¾, 1"	1"	5	25	13

TYPE GCRC GROUND ROD FITTING

For Bare or Insulated Copper Wire. This ground fitting is especially designed for ground rods. Makes a very neat installation and better bond.

Ground wire is wedged against the rod by tightening the screw and is permanently set by running down the locknut.



Cat. No.	Fits Ground Rod	Takes Wire B&S	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.
9447	½, ⅜"	8, 6 or 4	5	25	3½

TYPE GCH FITTING FOR RIGID CONDUIT



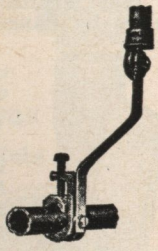
With Brass Washer

This fitting is equipped with flat washer. Rigid clamp jaws hold securely to water pipe.

Cat. No.	Conduit Ground Inches	Size Grounding Water Pipe	Size Grounding Ground Rod	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.
9402	½	½, ¾, 1"	1"	5	25	10

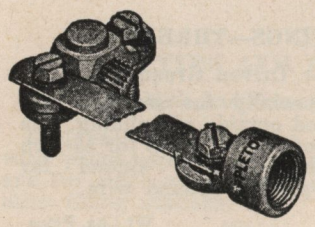
TYPE FGF FLEXIBLE GROUND FITTING

Has an 8-inch flexible copper strip that can be bent, twisted or turned into any position. Very desirable when the water pipe or ground rod is not easily accessible. If the ground conduit should by chance be a little too long or too short, the flexible strap can be formed to meet the conduit. Furnished with the popular Appleton Vise-grip clamp.



Cat. No.	Ground Inches	Water Pipe Inches	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.
9481	½	½, ¾ or 1	5	25	18

TYPE GSFF FLEXIBLE GROUND FITTING



Furnished with "V" shaped clamp. Fits any ½-inch Ground Conduit and takes ½ to 1-inch Ground Rod — solderless type. Can be bent, twisted or turned into any position; adjustable.

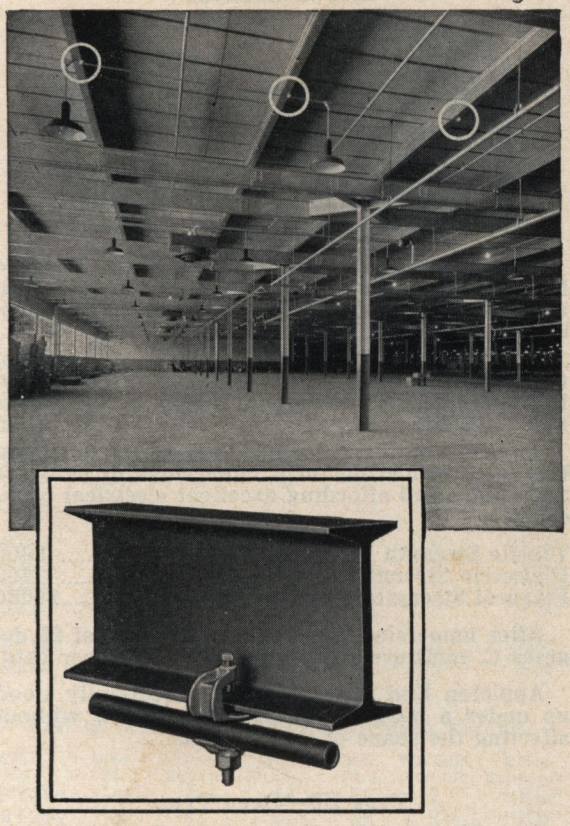
Cat. No.	Conduit Ground Inches	Size of Water Pipe Inches	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.
9494	½	½, ¾, 1	5	25	22

Schedule "GF" Discounts

APPLETON STA-TITE PIPE HANGERS

Cadmium Finish

For Use With Rigid Conduit (Heavy-Wall) and Threadless Thin-Wall Conduit



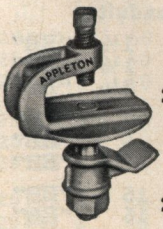
Type PHS with Single Conduit Parallel with Structural Shape

Sta-Tite Pipe Hangers embody many improvements over other types. The Type PHS permits running the conduit parallel with beam, crosswise, or any horizontal angle. This is also true of the Type PHD. These Hangers are all designed to accommodate ½, ¾ and 1-inch Rigid Conduit (Heavy-Wall) or ½, ¾, 1, 1¼ and 1½-inch Threadless Thin-Wall Conduit.

Cadmium Finish is the standard finish.

TYPE PHS — FOR SINGLE LINE CONDUIT

Run Parallel or at Right Angles



For ½ and ¾-Inch Rigid Conduit (Heavy-Wall); also ½, ¾, and 1-Inch Threadless Thin-Wall Conduit

Cat. No.	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Schedule
2330	10	100	80	"CF"

For 1-Inch Rigid Conduit (Heavy Wall); also 1¼ and 1½-Inch Threadless Thin-Wall Conduit

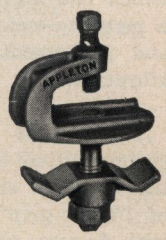
2331	10	50	60	"CF"

APPLETON STA-TITE PIPE HANGERS

Cadmium Finish

TYPE PHD — FOR TWO LINES OF CONDUIT

Run Parallel or at Right Angles



For ½ and ¾-Inch Rigid Conduit (Heavy-Wall); also ½, ¾, and 1-Inch Threadless Thin-Wall Conduit

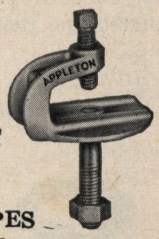
Cat. No.	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Schedule
2335	10	100	85	"CF"

For 1-Inch Rigid Conduit (Heavy-Wall); also 1¼ and 1½-Inch Threadless Thin-Wall Conduit

2336	10	50	50	"CF"

TYPE PH

Also for Use with Accessories Listed Below



Cat. No.	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Schedule
2342	10	100	65	"CF"

FOR ONE OR TWO PIPES

When Used With Type PH Hanger

Single Type



Single

For ½ and ¾-Inch Rigid Conduit (Heavy-Wall); also ½, ¾, and 1-Inch Threadless Thin-Wall Conduit

Cat. No.	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Schedule
2345	10	100	18	"CF"

For 1-Inch Rigid Conduit (Heavy-Wall); also 1¼ and 1½-Inch Threadless Thin-Wall Conduit

2346	10	100	18	"CF"

Double Type

For ½ and ¾-Inch Rigid Conduit (Heavy-Wall); also ½, ¾, and 1-Inch Threadless Thin-Wall Conduit

2350	10	100	20	"CF"

For 1-Inch Rigid Conduit (Heavy-Wall); also 1¼ and 1½-Inch Threadless Thin-Wall Conduit

Double

2351	10	100	20	"CF"

APPLETON LOCKNUTS AND BUSHINGS

Appleton "Tiger-grip" Drivenuts have extra features not found in regular locknuts. Note illustrations below which show the sharp, beveled teeth which cut into the outlet or switch box, insuring a metal-to-metal grounding. They lock with a firm and permanent grip—cannot be loosened through vibration.

The use of these Drivenuts gives a lock-tight spring action between threads and the surface of the box. No slipping — shoulders around outside of "Tiger-grip" Drivenuts allow for easy turning with fingers, pliers or wrench—tightening is readily done from all angles. Thoroughly cadmium plated—no rusting.

"TIGER-GRIP" DRIVENUTS



Top View



Bottom View

Cat. No.	Size In.	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.
BL-38	⅜	100	2500	30
BL-50	½	100	2500	30
BL-75	¾	100	1000	21
BL-100	1	50	500	21
BL-125	1¼	50	200	12
BL-150	1½	50	200	14
BL-200	2	25	50	7

CONDUIT BUSHINGS



BU-38	⅜	100	2500	55
BU-50	½	100	2500	55
BU-75	¾	100	1000	37
BU-100	1	50	500	32
BU-125	1¼	50	200	21
BU-150	1½	50	200	26
BU-200	2	25	100	36
BU-250	2½	10	50	30
BU-300	3	10	50	35
BU-350	3½	5	20	18
BU-400	4	5	20	26
BU-500	5	2	10	16
BU-600	6	2	10	21

CAPPED BUSHINGS



BUC-50	½	100	1000	30
BUC-75	¾	100	1000	39
BUC-100	1	50	500	35
BUC-125	1¼	50	200	24
BUC-150	1½	10	100	18
BUC-200	2	10	100	20
BUC-250	2½	10	30	16
BUC-300	3	5	20	14
BUC-350	3½	5	20	17
BUC-400	4	5	20	22

Schedule "LB" Discounts

APPLETON INSULATING END BUSHINGS

For Use with Rigid Conduit (Heavy-Wall)

TYPES EB AND EBS INSULATING END BUSHINGS



Type EB—Deep Type



Type EBS—Shallow Type

Appleton Insulating End Bushings are designed for use where space is limited and where a neat appearing and substantial insulated outlet is required on the end of conduit.

These bushings are made of a special phenol formaldehyde linen fabric commonly called bakelite laminated, a product especially noted for its high insulative property and mechanical strength.

After machining, these bushings are given special treatment rendering them impervious to moisture absorption and affording excellent electrical properties.

Tensile Strength in lbs. per sq. in..... 8000
Dielectric Strength, volts per Mil..... 700
Flexural Strength in lbs. per sq. in.....16000

After immersion in water for 24 hours at 25 degrees C. moisture absorption is 1.3 to 2 per cent.

Appleton End Bushings have successfully stood up under a heat test of 200 degrees F., without affecting the shape of the bushings.

Type EB—Deep Type

Threaded for ½ to 6-Inch Conduit

Cat. No.	Size Inches	Dimens., In. Depth	Dimens., In. Diam.	Std. Pkg.	Wt. Lbs. Per 100	Price Schedule
29101	½	¾	1⅛	50	2	"EB"
29102	¾	¾	1 3/16	50	2½	"EB"
29103	1	⅞	1⅝	50	5½	"EB"
29104	1¼	⅞	2	10	7½	"EB"
29105	1½	⅞	2¼	10	7½	"EB"
29106	2	1 1/16	2¾	10	10	"EB"
29107	2½	1¼	3¼	5	20	"EB"
29108	3	1¼	3⅞	5	20	"EB"
29109	3½	1¼	4⅜	5	25	"EB"
29110	4	1¼	5	5	25	"EB"
29112	5	1¼	6	1	50	"EB"
29113	6	1¼	7	1	60	"EB"

Type EBS—Shallow Type

Threaded for ½ to 6-Inch Conduit

29121	½	½	1⅛	50	1½	"EB"
29122	¾	½	1 3/16	50	1½	"EB"
29123	1	5/16	1⅝	50	2½	"EB"
29124	1¼	5/16	2	10	5	"EB"
29125	1½	5/16	2¼	10	5	"EB"
29126	2	5/16	2¾	10	7½	"EB"
29127	2½	¾	3¼	5	15	"EB"
29128	3	¾	3⅞	5	15	"EB"
29129	3½	¾	4⅜	5	20	"EB"
29130	4	¾	5	5	25	"EB"
29132	5	¾	6	1	35	"EB"
29133	6	¾	7	1	40	"EB"

APPLETON INSULATING END BUSHINGS

For Use With Rigid Conduit (Heavy-Wall)

TYPE EBC—DEEP TYPE—WITH SET SCREW

NOT THREADED



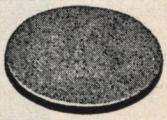
For ½ to 6-Inch Rigid Conduit (Heavy-Wall)

Cat. No.	Size In.	Dimens., In. Depth	Dimens., In. Diam.	Std. Pkg.	Wt. Lbs. Per 100	Price Schedule
29201	½	¾	1⅛	50	2	"EB"
29202	¾	¾	1 $\frac{5}{16}$	50	2½	"EB"
29203	1	⅞	1⅝	50	5½	"EB"
29204	1¼	⅞	2	10	7½	"EB"
29205	1½	⅞	2¼	10	7½	"EB"
29206	2	$\frac{15}{16}$	2¾	10	10	"EB"
29207	2½	1¼	3¼	5	20	"EB"
29208	3	1¼	3⅞	5	20	"EB"
29209	3½	1¼	4⅜	5	25	"EB"
29210	4	1¼	5	5	25	"EB"
29212	5	1¼	6	1	50	"EB"
29213	6	1¼	7	1	60	"EB"

For ½ to 2-Inch Electrical Metallic Tubing

Cat. No.	Size In.	Dimens., In. Depth	Dimens., In. Diam.	Std. Pkg.	Wt. Lbs. Per 100	Price Schedule
29T201	½	¾	$\frac{83}{84}$	50	2	"EB"
29T202	¾	¾	1.218	50	2½	"EB"
29T203	1	⅞	1.460	50	5½	"EB"
29T204	1¼	⅞	1.803	10	7½	"EB"
29T205	1½	⅞	2.020	10	7½	"EB"
29T206	2	$\frac{15}{16}$	2.480	10	10	"EB"

COVERS FOR INSULATING END BUSHINGS



Blank Cover



2-Hole Cover

BLANK COVERS Cat. No.	Size In.	Std. Pkg.	Price Schedule	TWO-HOLE COVERS Cat. No.	Size In.	Diam. Holes	Std. Pkg.	Price Schedule
29140	½	50	"EB"	29180	½	$\frac{17}{64}$	50	"EB"
29141	¾	50	"EB"	29181	¾	$\frac{11}{32}$	50	"EB"
29142	1	50	"EB"	29182	1	$\frac{7}{16}$	50	"EB"
29143	1¼	10	"EB"	29183	1¼	$\frac{9}{16}$	10	"EB"
29144	1½	10	"EB"	29184	1½	$\frac{11}{16}$	10	"EB"
29145	2	10	"EB"	29185	2	⅞	10	"EB"
29146	2½	5	"EB"	29186	2½	1⅛	5	"EB"
29147	3	5	"EB"	29187	3	1⅜	5	"EB"
29148	3½	5	"EB"	29188	3½	1⅝	5	"EB"
29149	4	5	"EB"	29189	4	1⅞	5	"EB"
29151	5	1	"EB"	29191	5	2¼	1	"EB"
29152	6	1	"EB"	29192	6	2½	1	"EB"

APPLETON INSULATING END BUSHINGS

For Use With Rigid Conduit (Heavy-Wall)



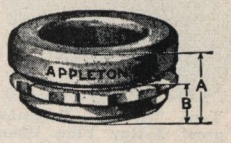
THREE-HOLE COVERS FOR INSULATING END BUSHINGS

Three-Hole Covers

Cat. No.	Size Inches	Holes	Diam. Holes	Std. Pkg.	Wt. Lbs. Per 100	Price Schedule
29160	½	Three	¼	50	.....	"EB"
29161	¾	Three	$\frac{17}{64}$	50	.....	"EB"
29162	1	Three	$\frac{11}{32}$	50	.....	"EB"
29163	1¼	Three	$\frac{15}{32}$	10	.....	"EB"
29164	1½	Three	$\frac{9}{16}$	10	.....	"EB"
29165	2	Three	¾	10	.....	"EB"
29166	2½	Three	$\frac{13}{16}$	5	.....	"EB"
29167	3	Three	1⅛	5	.....	"EB"
29168	3½	Three	1⅜	5	.....	"EB"
29169	4	Three	1½	5	.....	"EB"
29171	5	Three	1⅞	1	.....	"EB"
29172	6	Three	2¼	1	.....	"EB"

MALE TYPE INSULATING END BUSHINGS

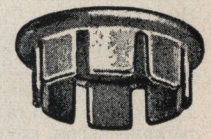




Size In.	Diam.	Depth A	Depth B	Std. Pkg.	Type MEB Without Locknut Cat. No.	Type MEB Without Locknut Price Schedule	Type MEBL With Locknut Cat. No.	Type MEBL With Locknut Price Schedule
½	1⅛	¾	$\frac{7}{16}$	100	29301	"EB"	29321	"EB"
¾	1 $\frac{5}{16}$	⅞	$\frac{7}{16}$	100	29302	"EB"	29322	"EB"
1	1⅝	⅞	$\frac{9}{16}$	100	29303	"EB"	29323	"EB"
1¼	2	⅞	$\frac{9}{16}$	50	29304	"EB"	29324	"EB"
1½	2¼	⅞	$\frac{9}{16}$	50	29305	"EB"	29325	"EB"
2	2¾	$\frac{15}{16}$	$\frac{9}{16}$	50	29306	"EB"	29326	"EB"
2½	3¼	1¼	¾	20	29307	"EB"	29327	"EB"
3	3⅞	1¼	¾	20	29308	"EB"	29328	"EB"
3½	4⅜	1¼	¾	10	29309	"EB"	29329	"EB"
4	5	1¼	¾	10	29310	"EB"	29330	"EB"

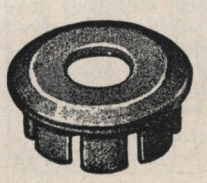
SNAP-IN BLANKS

Used for closing up the knock-outs in Service or Outlet Boxes. Snaps into place like a glove fastener. Neat in appearance, made in one piece, and thoroughly rust-proofed.



Cat. No.	Size In.	Wt. Lbs. Per 1000	Price Schedule	Cat. No.	Size In.	Wt. Lbs. Per 1000	Price Schedule
	½	17	"LB"	18873	1¼	40	"LB"
	¾	20	"LB"	18874	1½	43	"LB"
	1	30	"LB"	18875	2	65	"LB"

SNAP-IN BUSHINGS



The Snap-In Bushings are the same as the blanks above except that they have a hole and this hole in the ½-inch bushing will take single braid rubber-covered wire up to No. 8; ¾-inch bushing will take double braid wire up to No. 4.

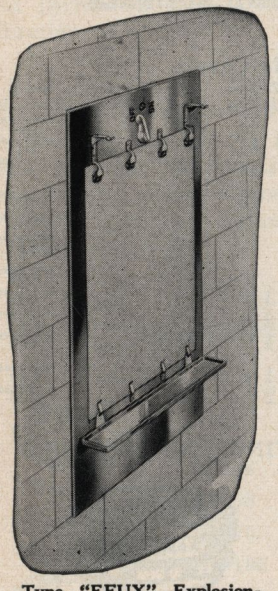
Cat. No.	Size	Wt. Lbs. Per 1000	Price Schedule
SU50	½-inch	15	"LB"
SU75	¾-inch	20	"LB"

TYPE EFUX APPLETON EXPLOSION-PROOF X-RAY FILM ILLUMINATOR

WITH EXPLOSION-PROOF SWITCH

Class I, Groups C and D

To Take Two 15 Watt T-12 Fluorescent Lamps Furnished with 110-125 Volt 60 Cycle Ballast



Type "EFUX" Explosion-proof X-Ray Film Illuminator, flush mounting in tile wall.

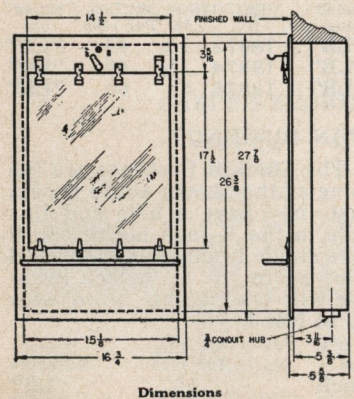
The Type "EFUX" Explosion-proof X-Ray Film Illuminator is designed for flush mountings in Hospital Operating Rooms. The newly developed Illuminator is another step towards safety where hardous gases are present.

The fixture is compact and includes an Explosion-proof switch which eliminates the need of an additional switch Unilet. The handles of the Explosion-proof switch extends through the panel within convenient reach of the operator. The glass cover panel is of sturdy, neat construction. Four chrome plated roller clips at top of glass are provided to hold the X-Ray film. Two extended hinge clips are furnished to support the wet film holder. A drip tray may be used and then can be easily adapted to two of the four lower clips which hold the panel.

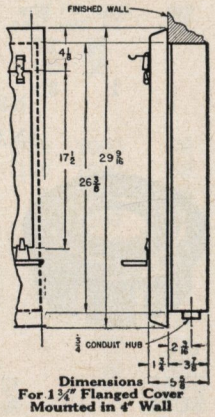
A threaded hub for ¾-inch rigid conduit is provided in cabinet. Two cabinet styles, one shallow and one deep, are obtainable as illustrated in dimensional drawings below.

When installing, the metal cabinet should first be mounted in the wall. The fixture is mounted in cabinet with the use of a union (which is furnished). Line wires are connected to the connection block located under screw cover in lower housing. All other wiring and sealing is completed at the factory.

To relamp, remove switch handle, loosen one cover screw and remove plastic glass panel cover. Tip fixture out of the cabinet by releasing tension of spring (no tool is necessary for this operation) then remove screw cover and pull out lamp.



Dimensions For Flush Mounting



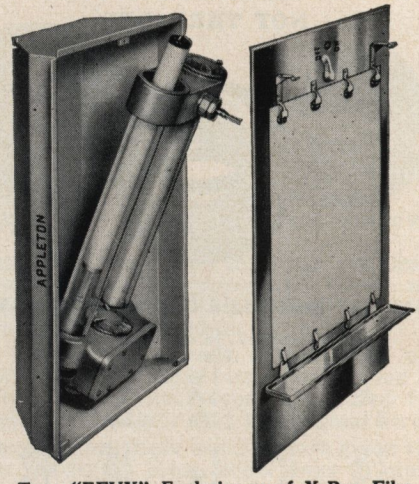
Dimensions For 1¾" Flanged Cover Mounted in 4" Wall

TYPE EFUX APPLETON EXPLOSION-PROOF X-RAY FILM ILLUMINATOR

WITH EXPLOSION-PROOF SWITCH

Class I, Groups C and D

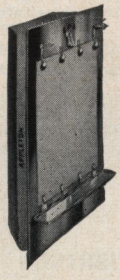
To Take Two 15 Watt T-12 Fluorescent Lamps Furnished with 110-125 Volt 60 Cycle Ballast



Type "EFUX" Explosion-proof X-Ray Film Illuminator with cover removed.

The type "EFUX" Explosion-proof X-Ray Film Illuminator is designed for bottom entrance of conduit, however the complete unit can be inverted when mounted in the wall to allow for conduit entrance at the top.

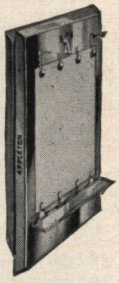
When cabinet is mounted with hub at top, the switch handle will be at the bottom. If a drip tray is to be used, a handle with an extension is included. This handle is located under the drip tray for easy elbow operation. Specify Cat. No. A-182C Utility Handle.



Flush Mounting With Opal Plastic Glass

Hub Size	Wt. Lbs. Each	Cat. No.	List Each
	Without Drip Tray		
¾"	40	A182-A	•
	With Drip Tray		
¾"	40	A182-D	•

With 1¾-inch Flanged Cover For 4-inch Walls With Opal Plastic Glass



Hub Size	Wt. Lbs. Each	Cat. No.	Price
	Without Drip Tray		
¾"	40	A182-E	•
	With Drip Tray		
¾"	40	A182-F	•

DRIP TRAY



Price, No. A182-B Drip Tray ..... each •



UTILITY HANDLE

To be used if unit is inverted and Drip Tray is used.

Price, No. A182-C ..... each •

Finish: Cover—Stainless Steel, Satin Finish. Housing—Protective Coating Outside, White Enamel Inside. Drip Tray—Stainless Steel. Fluorescent Lamps not included.

• Prices upon application.

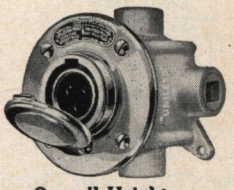
APPLETON ELECTRIC COMPANY

CPS SERIES UNILETS

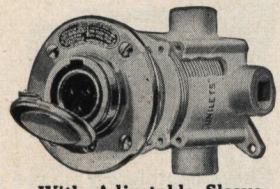
EXPLOSION-PROOF DEAD-END RECEPTACLE AND PLUGS—FOR HOSPITALS

(Patented March 19, 1935)

TYPE CPSH EXPLOSION-PROOF



Overall Height
Unilet and Receptacle
15 Amp.—4¼ in.
30 Amp.—6¾ in.



With Adjustable Sleeve
Max. Sleeve Adjustment 1⅛"
Max. Overall Height Unilet, Sleeve and Receptacle, 5½"

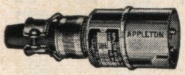
Embodies Dead-End contact feature. No live contacts are exposed to the surrounding atmosphere which contains the volatile, inflammable, anaesthetical fumes of hospital operating rooms and the explosive vapors of industrial plants.

This Dead-End Receptacle feature, together with the confinement of the arc within the internal limits of the plug combustion chamber, afford a dual protection for the user of explosion-proof equipment. Grounded thru shell and extra pole.

2-Wire-3-Pole

Form	Max. Amp.	Volts 60 Cy. AC	Max. H.P.	Phase	Size Hubs	STYLE 2 Cat. No.	Price Each
1	15	230 115	1	1	¾	28031	*
2	15 30	230 115	1½	1	¾	28135	*
2	15 30	230 115	1½	1	1	28136	*
3-Wire, 4-Pole							
2	15 30	230 115	3	3	¾	28145	*
2	15 30	230 115	3	3	1	28146	*
With Adjustable Sleeve							
2-Wire-3-Pole							
1	15	230 115	1	1	¾	28031	*

Form 1 Unilet Body has three hubs, two of which have close-up plugs; one hub left open.
Form 2 Unilet Body has four hubs, three of which have close-up plugs; one hub left open.



TYPE CPP PLUGS

For use with CPS, CPSI and CPSH Series Unilets.

2-Wire, 3-Pole

For Use With Form	Max. Amp.	Volts 60 Cy. AC	Max. H.P.	Phase	Diameter Cable	Cat. No.	Price Each
1	15	230 115	1	1	.250-.375 .375-.500 .500-.625	28040 28041 28042	* * *
2	30	230 115	1½	1	.500-.625 .625-.750 .750-.875	28070 28071 28072	* * *
3-Wire, 4-Pole							
2	30	230 115	3	3	.500-.625 .625-.750 .750-.865	28075 28076 28077	* * *

Cadmium Finish is standard finish for Unilet: Face of Receptacle is Chromium plated. Plugs are buffed and lacquered, with Chromium plated Cord Grip.

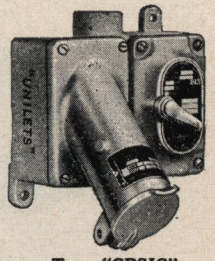
*See Price List

CPSI SERIES UNILETS

EXPLOSION-PROOF, DEAD-END RECEPTACLES AND PLUGS—FOR INDUSTRIAL PLANTS

15 Amp. or 1 H.P., 115 or 23 Volt, 60 Cycle A.C.

For use where hazardous fumes and explosive atmosphere exist. An extra ground conductor is furnished to carry off any accumulated charges in either plug or receptacle. Always install cover with hinge in downward position.



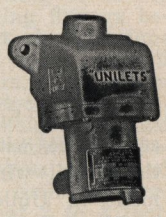
Type "CPSIC" Unilet Complete with Lift Cover (Closed)

CPSIA ANGLE TYPE

2-Wire, 3-Pole

Cat. No.	Form	Size In.	Dimens. Inches Ht.	Width	Price Each
28056	5-10	½	6¼	4¾	*
28066	5-10	¾	6¼	4¾	*

Cadmium finish.



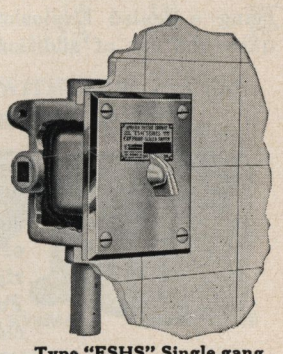
Plugs for use with CPSI Series, Unilets, listed in the preceding column.

ESH SERIES EXPLOSION-PROOF SEALED HOSPITAL SWITCH UNILET

(Patent Pending)

CLASS I, GROUPS C AND D

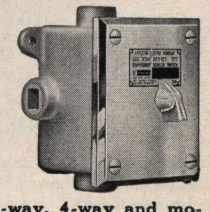
Designed for use in hospital operating rooms. These sealed switches are made in accordance with requirements for hazardous locations. The switching device is sealed with wire leads furnished for connection purposes. The splices are made in a Unilet body making the complete assembly an explosion-proof unit without the use of Sealing Unilets.



Type "ESHS" Single gang Explosion-proof Sealed Hospital Switch Unilet

TYPE ESHS SINGLE-GANG

Unilet bodies have one ½-inch conduit hub on each of four sides. One hub is open and the other three have close-up plugs. S-P., 10 A. 125 V.; 5 A. 250 V. D-P., 10 A. 250 V.



Any combination of single, double, 3-way, 4-way and momentary switches can be furnished upon request. Prices on application.

‡These are available in cadmium finish for use in industrial installations where a highly polished chrome cover is not required.

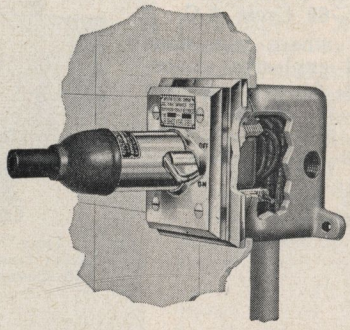
*See Price List

APPLETON ELECTRIC COMPANY

ESH SERIES
EXPLOSION-PROOF SEALED HOSPITAL RECEPTACLE AND PLUG

(Patent 2,273,729)

CLASS I, GROUPS C AND D

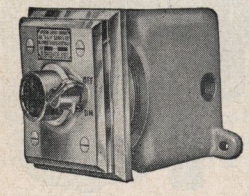


Type "ESHR" Explosion-proof Sealed Hospital Receptacle (sectional view)

Designed for use in hospital rooms. Made in accordance with requirements for hazardous locations. All wire leads are sealed and connections made in Unilet body furnished. Adjustments for surface mounting is provided through means of an adjustable sleeve in Unilet.

The receptacle member is a sealed unit with an inter-locking switch whereby the plug may be inserted or withdrawn only when switch is in "off" position. Likewise, the switch handle cannot be moved to the "on" position until plug is seated and in electrical contact with the receptacle. This device being a sealed Explosion-proof unit, does not require the use of additional Sealing Unilets.

TYPE ESHR



Unilet body is furnished with two openings on one side and one opening on each of three sides for ½-inch rigid conduit (heavy-wall). Four of the openings have close-up plugs.

Rating: 2-wire, 3-pole, 10 Amp. 125 volt, ½ H.P. 115 volt.

Complete—with chrome Cover		Body Only—with Temporary Cover		Switch Equipment Only—Chrome Finish		Switch Equipment Only—Cadmium Finish‡	
Cat. No.	Price Each	Cat. No.	Price Each	Cat. No.	Price Each	Cat. No.	Price Each
28280	*	28281	*	28282	*	28283	*

‡These are available in cadmium finish for use in industrial installations where a highly polished chrome cover is not required.

Finish: Covers are chromium plated.

Dimensions: See a following page.

*See Price List

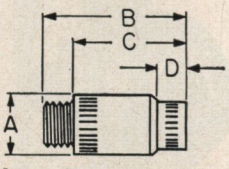
UNY SERIES
EXPLOSION-PROOF EXPANSION UNIONS

Listed by Underwriters' Laboratories, Inc.

FOR CLASS I, GROUPS C AND D; CLASS II, GROUPS E, F AND G



Type "UNY" Explosion-Proof Expansion Union Standard



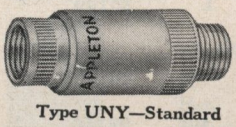
These completely new Appleton Expansion Unions are more compact, are safer and easier to install than conventional union fittings.

Faster, Easier Installation: The Appleton Expansion Union is shipped as one assembled unit, and it stays that way. It is never taken apart, either during installation or while performing maintenance after initial installation. There is no need to fumble with three separate parts, and there are only two tightening operations as compared to three with a conventional union. The result:—Greatly reduced effort and time required for installation.

Compactness: The reduced external diameters of Appleton Expansion Unions permit easy installation in places where you would encounter difficulty installing conventional unions.

Added Safety: The unique, expansion design insures absolute explosion-proof protection with every installation. They are installed without dismantling, thus explosion-proof surfaces are never exposed to dirt, grit or damage.

MALE TYPES



Type UNY—Standard



Type UNYL—Long

Male Type UNY—Standard

Cat. No.	Dimensions, Inches Size	A	B	C	Maximum Expansion D	Std. Pkg.	Wt. Lbs. 100 Pcs.
UNY 50	½	1 3/16	2 7/8	2 5/16	½	50	39
UNY 75	¾	1 7/16	3 1/16	2 7/16	17/32	50	54
UNY 100	1	1 ¾	3 3/8	2 11/16	21/32	25	82

Male Type UNYL—Long

UNYL 50	½	1 3/16	3 7/8	3 5/16	1	25	47
UNYL 75	¾	1 7/16	4 1/16	3 7/16	1 3/32	25	62
UNYL 100	1	1 ¾	4 1/16	4	1 1/32	10	107

FEMALE TYPES



Type UNF—Standard



Type UNFL—Long

Female Type UNF—Standard

Cat. No.	Dimensions, Inches Size	A	B	C	Maximum Expansion D	Std. Pkg.	Wt. Lbs. 100 Pcs
UNF 50	½	1 3/16	2 15/16	..	½	50	41
UNF 75	¾	1 7/16	3 1/16	..	17/32	50	56
UNF 100	1	1 ¾	3 3/8	..	21/32	25	84

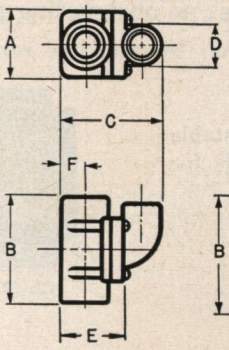
Female Type UNFL—Long

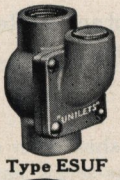
UNFL 50	½	1 3/16	3 15/16	..	1	25	64
UNFL 75	¾	1 7/16	4 1/16	..	1 3/32	25	94
UNFL 100	1	1 ¾	4 ¾	..	1 11/32	10	109

APPLETON ELECTRIC COMPANY

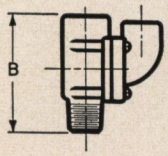
ESU SERIES SEALING UNILETS
EXPLOSION-PROOF

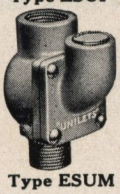
For Sealing Horizontal and Vertical Runs of Conduit





Type ESUF





Type ESUM

Dimension Table

Size	A	B	C	D	E	F
½	1 15/16	3	2 15/16	1⅛	1 13/16	11/16
¾	1 15/16	3⅛	2 15/16	1⅛	1 13/16	11/16
1	1 15/16	3⅜	3¼	1⅛	2 3/16	15/16
1¼	2⅛	3 15/16	3 9/16	1⅛	2½	1
1½	3	4½	4 9/16	1⅝	3	1¼
2	3	5⅛	5	1⅝	3 7/16	1½
2½	4 15/16	7 15/16	5 15/16	2	3 15/16	1¾
3	5⅝	8⅝	6½	2⅜	4⅛	2⅛

Seal Unilets listed below may be mounted either vertically or horizontally and are supplied with threaded screw-plugs which, when removed, will provide openings for pouring the cement into the fitting after the wiring has been completed. The ½, ¾ and 1-inch sizes can be used either way by changing the Sealing Cover to required positions. The 1¼, 1½, 2, 2½ and 3-inch sizes can be sealed for horizontal runs by using the threaded hub on the side of the Unilet, leaving the cover in a horizontal position. The Sealing Unilet should be well-filled with approved cement in order to effectively seal that section of conduit in which it lies.

Sealing Unilets Complete

Size	Type ESUF Female Both Ends Cat. No.	Price Each	Type ESUM Female One End Male Other End Cat. No.	Price Each	Sealing Cement Required
½	18670	*	28670	*	3 oz.
¾	18671	*	28671	*	4 oz.
1	18672	*	28672	*	5 oz.
1¼	18673	*	28673	*	8 oz.
1½	18674	*	28674	*	18 oz.
2	18675	*	28675	*	24 oz.
2½	18676	*	28676	*	30 oz.
3	18677	*	28677	*	46 oz.

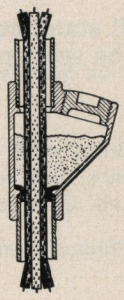
SEALING CEMENT AND FIBER FILLER

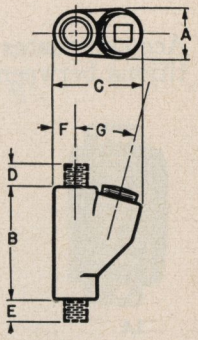
"Apelco" Sealing Cement Cat. No.	Package Size	Price Each	Asbestos Fiber Filler Cat. No.	Package Size	Price Each
8664	4 oz.	*	18690	1 oz.	*
8665	8 oz.	*	18691	4 oz.	*
8666	1 lb.	*	18692	1 lb.	*
3667	10 lb.	*	.....	....	*

*See Price List

EYS SERIES SEALING UNILETS
EXPLOSION-PROOF
For Sealing Vertical Runs of Conduit Only

For Class 1 hazardous locations, the National Electrical Code requires that provisions be made for sealing off the conduit system at various points with an approved sealing cement. This must be done to prevent the spread of explosive gases throughout the entire conduit system and connecting devices.





Where the conduit terminates in any housing within which is a device of a sparking or arcing nature, it is necessary to place sealing fittings before and after. Enclosures in these classifications are motor starters, motor terminal boxes and all types of switches and circuit breakers. Also, wherever a conduit leads from a hazardous to a non-hazardous location, the conduit should be sealed off so that any gases accumulating within the system could not enter a non-hazardous area and possibly cause an explosion. Single seals are permissible only in short conduit runs of 2 to 3 feet. Any conduit length greater than this requires the use of two sealing fittings.

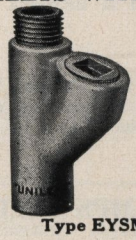
Dimension Table

Size	A	B	C	D & E	F	G
½	1¼	3¼	2⅜	9/16	9/16	15°
¾	1 9/16	3⅝	2 15/16	13/16	11/16	15°
1	1 9/16	4¼	3¼	13/16	⅞	15°
1¼	2	5 1/16	3 15/16	13/16	1	30°
1½	2½	5½	4¾	13/16	1¼	30°
2	2 15/16	6¼	5 9/16	1 1/16	1½	30°
2½	3⅜	7 7/16	6 7/16	1 3/16	1 11/16	30°
3	4½	8½	7¾	1 9/16	2 1/16	30°

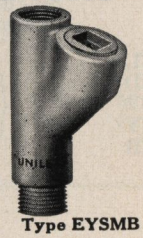
SEALING UNILETS WITH PIPE PLUGS*



Type EYSF



Type EYSMA



Type EYSMB

Size In.	Type EYSF Female Hub Top and Bottom Cat. No.	Type EYSMA Male Hub Top and Female Hub Bottom Cat. No.	Type EYSMB Female Hub Top & Male Hub Bottom Cat. No.	Price Each	Sealing Cement Required
½	38670	48670	58670	*	2 oz.
¾	38671	48671	58671	*	3 oz.
1	38672	48672	58672	*	4 oz.
1¼	38673	48673	58673	*	8 oz.
1½	38674	48674	58674	*	12 oz.
2	38675	48675	58675	*	18 oz.
2½	38676	48676	58676	*	30 oz.
3	38677	48677	58677	*	90 oz.

Cadmium Finish.

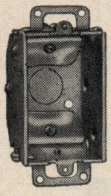
*All Sealing Unilets of the "EYS" Series must be filled with "Apelco" Sealing Cement in order to comply with requirements of Underwriters' Laboratories.

*See Price List

STEEL CITY ELECTRIC COMPANY MARK OF QUALITY

SECTIONAL SWITCH BOXES

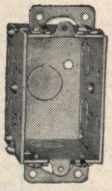
Accommodates all standard flush switches and receptacles. Removable sides; no obstructing partitions between the sections. Holes for nailing to joist.



LC

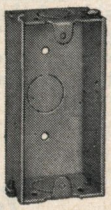
Boxes with beveled corners can be furnished with one-screw adjustable ears, with adjustment up to ¾". The one-screw ears are reversible for side mounting (see illustration LCN).

Clamps used are shown at bottom of page.



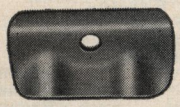
CL-CD

Cat. No.	Description	Deep	Wide	Long	Wiring Cu. In.Cap.	Approx. Welght Lb. per 100	Std. Pkg. Quantity
	FOR NON-METALLIC FLEXIBLE TUBING (Loom) AND NON-METALLIC SHEATHED CABLE						
	Pri-outs are 21/32" to completely close opening around cable, meeting requirements. Pry-out in ½" or larger KO's not approved by U.L.						
LO	No clamps	2 pri-outs each beveled corner. KO in bottom.	2¼"	2"	3"	10.8	56	50
LC	C-1 clamps	2 pri-outs each beveled corner. KO in bottom.	2¼"	2"	3"	10.8	61	50
	FOR RIGID METALLIC CONDUIT						
	Pri-outs are 21/32", Knockouts are for ½" conduit. Knockouts for ¾" conduit can be furnished if desired. Holes for studs and nails.						
CL	2 KO's each side, 1 each end and 1 in bottom, except CD has two KO's in bottom.		2"	2"	3"	10.2	52	50
CD			2½"	2"	3"	12.8	62	50
CW			2¾"	2"	3"	14.2	67	50
CY			3½"	2"	3"	18.0	80	50
CB			1½"	2"	4"	10.2	49	50



CB

CLAMPS USED IN STEEL CITY SWITCH AND OUTLET BOXES



C-1



C-3



C-5



C-8



C-10



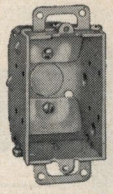
C-13

Galvanized finish is employed.

STEEL CITY ELECTRIC COMPANY MARK OF QUALITY

SECTIONAL SWITCH BOXES—Continued

Boxes with beveled corners can be furnished with adjustable ears, with adustment up to ¾".

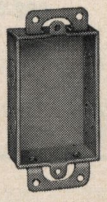


LCN

The one-screw ears are reversible for side mounting



LX



SSB

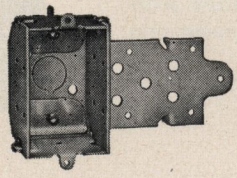
Cat. No.	Description	Deep	Wide	Long	Wiring Cu. In. Cap.	Approx. Weight Lb. per 100	Std. Pkg. Quan.
FOR FLEXIBLE METALLIC CONDUIT							
	Pri-outs are 21/32", Knockouts are for ½" conduit.						
LX	2 pri-outs each end and side. KO in bottom. C-3 clamps.	2½"	2"	3"	12.8	69	50
LXM	2 pri-outs each end and side. KO in bottom. C-3 clamps.	2"	2"	3"	12.0	60	50
FOR NON-METALLIC FLEXIBLE TUBING (Loom) AND NON-METALLIC SHEATHED CABLE							
	Pri-outs are 21/32", Knockouts are for ½" conduit.						
LCN	C-13 clamps — 2 pri-outs each beveled corner, 1 KO in bottom.	2¼"	2"	3"	10.8	61	50
LXW	C-5 clamps — 2 pri-outs each end and side—1 KO in bottom.	2½"	2"	3"	12.8	68	50
LXMW	C-5 clamps — 2 pri-outs each end and side—1 KO in bottom.	2"	2"	3"	10.2	59	50
SSB	2 pri-outs each side ..... Lugs and Mounting ears. Non-gangable	1"	2"	3"	4.7	35	100
SWB	2 pri-outs each end, C-5 clamps — Lugs and Mounting ears. Non-gangable	1½"	2"	3"	7.6	50	50

Galvanized finish is employed.

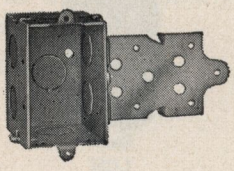
MARK OF QUALITY STEEL CITY ELECTRIC COMPANY

BRACKET SWITCH BOXES

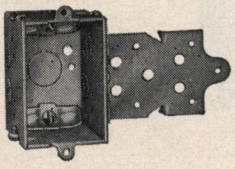
Bracket Welded to Box



802-S



805-S



806-SW—807-SW
Difference
only in depth.

Cat. No.	Description	Deep	Wide	Long	Wiring Cu. In. Cap.	Approx. Weight Lb. per 100	Std. Pkg. Quantity
FOR NON-METALLIC FLEXIBLE TUBING (Loom)							
Pri-outs are $\frac{21}{32}$", Knockouts for ½" conduit.							
800-S No clamps	Beveled Boxes. Pri-outs: two in each beveled corner. KO's: one in bottom.	2¼"	2"	3"	10.8	67	50
802-S C-1 clamps		2¼"	2"	3"	10.8	71	50
FOR RIGID METALLIC CONDUIT							
Knockouts are for ½" conduit.							
803-S	Two KO's each side, one each end and one in bottom	2¾"	2"	3"	14.2	80	50
804-S	Two KO's each side, one each end and one in bottom, except 804-S has two KO's in bottom.	2½"	2"	3"	12.8	74	50
805-S		2"	2"	3"	10.2	64	50
FOR FLEXIBLE METALLIC CONDUIT AND ARMORED CABLE							
Pri-outs are $\frac{21}{32}$", Knockouts are for ½" conduit.							
806-S C-3 clamps	Two Pri-outs in both ends and sides. KO in bottom.	2½"	2"	3"	12.8	81	50
807-S C-3 clamps		2"	2"	3"	10.2	72	50
FOR NON-METALLIC SHEATHED CABLE							
806-SW C-5 clamps	Pri-outs $\frac{21}{32}$": two in ends and sides. KO for ½" conduit in bottom. 802-SN is bevelled.	2½"	2"	3"	12.8	80	50
807-SW C-5 clamps		2"	2"	3"	10.2	71	50
802-SN C-13 clamps		2¼"	2"	3"	10.8	76	50

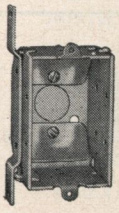
Galvanized finish is employed.

STEEL CITY ELECTRIC COMPANY MARK OF QUALITY

"V" TYPE BRACKET SWITCH BOXES
NO LATH SUPPORTS

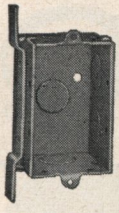
For Use in Wall Board, Beaver Board, Veneer Board and Plaster Board Construction

Provides a mounting that simplifies installations where wall, veneer or other boards are used. The flat "V" Type Bracket, spot welded onto the long side of a standard switch box, provides an easy means for solidly mounting the switch box to the wide side of a two by four, without channeling out wall board or studding. The edges of the switch box comes perfectly flush with the outer surface of the board.



LCNV

Cat. No.		Description	Deep	Wide	Long	Wiring Cu. In. Cap.	Approx. Weight Lb. per 100	Std. Pkg. Quantity
FOR NON-METALLIC FLEXIBLE TUBING (Loom)								
		Pri-outs are 21/32", Knockouts for ½" conduit.						
LOV	No clamps	Two pri-outs each beveled corner. One KO in bottom.	2¼"	2"	3"	10.8	59	50
LCV	C-1 clamps		2¼"	2"	3"	10.8	64	50
LCNV	C-13 clamps	Two pri-outs each end and one side. One KO in bottom.	2¼"	2"	3"	10.8	68	50
LXWV	C-5 clamps		2½"	2"	3"	12.8	73	50
LXMWV	C-5 clamps		2"	2"	3"	10.2	63	50
FOR FLEXIBLE METALLIC CONDUIT								
		Pri-outs are 21/32", Knockouts are for ½" conduit.						
LXV	C-3 clamps	Two pri-outs each end and one side. One KO in bottom.	2½"	2"	3"	12.8	74	50
LXMV	C-3 clamps		2"	2"	3"	10.2	66	50
FOR RIGID METALLIC CONDUIT								
		Knockouts for ½" conduit.						
CLV		Knockouts: one each end, two in one side, one bottom, except that CDV has two KO's in bottom.	2"	2"	3"	10.2	57	50
CDV			2½"	2"	3"	12.8	66	50
CWV			2¾"	2"	3"	14.2	69	50



CLV

DOOR SWITCH
For New and Old Work



DS-25

Cat. No.	Switch Control	Outside Dimension of Box Ears Extended ½" Beyond Each End			½" Conduit Knockouts		Type of Switch With 16 Gauge Wire Leads	Weight Lb. per 100	Std. Pkg.
		Deep	Wide	Long	Ends	Bottom			
DS-25	Light on when door is open.	1½"	1⅜"	2 11/16"	1	1	6 Amp., 125 V.	55	10
DS-25-V		Same as DS-25 but with metal plate 4" long, 1½" wide, for old work..							
DS-30	Light on when door is closed	Otherwise same as DS-25.....					3 Amp., 250 V.	70	10
DS-30-V		Otherwise same as DS-25-V.....						55	10
								70	10

Galvanized finish is employed.

MARK OF QUALITY STEEL CITY ELECTRIC COMPANY

3¼" and 3½" OCTAGON BOXES and ROUND COVERS

Made of pressed steel—galvanized. Strong construction. Knockouts are clean cut and readily removed. Curved slots in covers are for cover screws and permit perfect adjustment of covers without the necessity of removing screws. All boxes have holes in bottom for fixture studs and nails.


24151


24-C-1


24-C-2


24-C-6


24-C-12

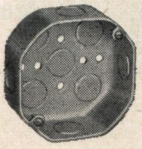

24-C-28

Cat. No.	Description	Wiring Cu. In. Cap.	Approx. Weight Lb. per 100	Std. Pkg. Quantity
	3¼" OCTAGON BOXES—1½" DEEP			
24151 ½	KO's for ½" conduit: 4 in sides, 1 in bottom.....	10.6	40	50
24151-¾	KO's for ¾" conduit: 1 each of four sides. For ½" conduit: 1 in bottom.....	10.6	40	50
24151 ½ & ¾	KO's for ½" conduit: 2 in opposite sides, 1 in bottom. For ¾" conduit: 2 in opposite sides....	10.6	40	50
	3½" OCTAGON BOXES—1½" DEEP			
24155	KO's: 2 for ½" conduit and 4 for loom in sides; 1 for ½" conduit and 4 for loom in bottom	12.2	45	50
	COVERS FOR 3¼" AND 3½" ROUND AND OCTAGON BOXES—DIA. 3½"			
24-C-1	Flat Blank	.0	19	100
24-C-2	Raised ⅜" Blank.....	1.0	20	100
24-C-6	Flat with KO for ½" in center.....	.0	19	100
24-C-7	Raised ⅜" with KO for ½" in center.....	1.0	20	100
24-C-12	Raised drop cord—⅜" metal bushing.....	1.0	20	100
24-C-28	Flat snap switch or wall receptacle cover with bolts and nuts. Slots give range of centers from ⅞" to 1⅞"	.0	18	100
24-C-35	Raised ⅜" with keyed lug for sign receptacle....	1.0	16	100

STEEL CITY ELECTRIC COMPANY MARK OF QUALITY

4″ OCTAGON BOXES AND ROUND COVERS

Made of pressed steel—galvanized. Knockouts are clean cut and readily removed. Curved slots in covers are for cover screws and permit perfect adjustment of covers without the necessity of removing screws. All boxes have holes in bottom for fixture studs and nails.


54151½


54-C-1


54-C-2


54-C-3


54-C-7


54-C-12


54-C-14


54-C-28

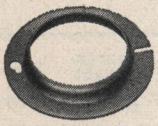
Cat. No.	Description	Wiring Cu. In. Cap.	Approx. Weight Lb. per 100	Std. Pkg. Quantity
	4″ OCTAGON BOXES—1½″ DEEP			
54151-½	Side KO's: 4 for ½″; Bottom KO's: 5 for ½″	16.5	56	50
54151-¾	Side KO's: 4 for ¾″; Bottom KO's: 3 for ½″, 2 for ¾″	16.5	56	50
54151-½ & ¾	Side KO's: 2 for ½″ (in opposite sides), 2 for ¾″ (in opposite sides); Bottom KO's: 3 for ½″, 2 for ¾″	16.5	56	50
	4″ OCTAGON BOXES—2⅛″ DEEP			
54171-½	Side KO's: 4 for ½″; Bottom KO's: 5 for ½″	23.0	70	50
54171-¾	Side KO's: 4 for ¾″; Bottom KO's: 3 for ½″, for ¾″	23.0	70	50
54171-½ & ¾	Side KO's: 2 for ½″ (in opposite sides), 2 for ¾″ (in opposite sides); Bottom KO's: 3 for ½″, 2 for ¾″	23.0	70	50
54171-1	Side KO's: 4 for 1″; Bottom KO's: 3 for ½″, 2 for ¾″	23.0	70	50
	COVERS FOR 4″ OCTAGON BOXES—DIAM. 4¼″			
54-C-1	Flat Blank	.0	27	100
54-C-2	Raised ⅝″ Blank.....	3.7	34	100
54-C-3	Raised ⅝″ open with ears; drilled 2$^{23}/_{32}$″ on centers to take 3¼″ cover, receptable or steel cover....	3.7	23	50
54-C-3-1	Same as 54-C-3 except raised 1″.....	5.9	32	25
54-C-3-1¼	Same as 54-C-3 except raised 1¼″.....	7.4	36	25
54-C-6	Flat with ½″ KO in center.....	.0	27	100
54-C-7	Raised ⅝″, ½″ KO in center.....	3.7	33	100
54-C-12	Raised ⅝″ drop cord, with ⅜″ bushed hole.....	3.7	35	100
54-C-14	Raised ⅝″ for single switch or receptacle.....	3.6	24	100
54-C-28	Flat snap switch or wall receptacle cover with bolts and nuts. Slots give range of centers from ⅞″ to 1⅞″.	.0	24	100

MARK OF QUALITY **STEEL CITY ELECTRIC COMPANY**

COVERS FOR ROUND AND OCTAGON BOXES—Continued



54-C-35



54-C-48

Cat. No.	Description	Wiring Cu. In. Cap.	Approx. Weight Lb. per 100	Std. Pkg. Quantity
54-C-35	Raised ⅝" with keyed lug for sign receptacle....	3.7	30	100
54-C-48	Raised ⅝" open canopy; opening 2¾" diam.....	3.7	22	100

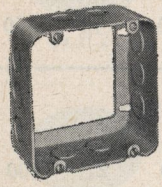
EXTENSION RINGS

For 3¼" and 4" Octagon, 4" and 4-11/16" Square and Utility Boxes

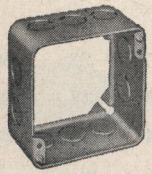
Cat. No.	Description	Deep	Wiring Cu. In. Cap.	Approx. Weight Lb. per 100	Std. Pkg. Quantity
	FOR 3¼" OCTAGON BOXES				
25151	KO's: ½" or ¾", or combination ½" and ¾". ‡See Note	1½"	10.6	30	50
	FOR 4" OCTAGON BOXES				
	Two tapped lugs at top and two untapped lugs at bottom.				
55151	KO's: ½" or ¾", or combination ½" and ¾".	1½"	16.5	41	50
55171	KO's: ½", ¾" or 1". ‡See Note	2⅛"	23.0	60	50
	FOR 4-11/16" SQUARE BOXES				
73151	KO's: ½" or ¾", or combination ½" and ¾".	1½"	30.0	76	25
73171	KO's: ½", ¾" or 1", or combinations ½" and ¾" or ¾" and 1". (Specify combination desired). ‡See Note	2⅛"	42.0	96	25
	FOR 4" SQUARE BOXES				
53151	KO's: ½" or ¾", or combination ½" and ¾".	1½"	21.1	51	50
53171	KO's: ½", ¾" or 1", or combinations ½" and ¾" or ¾" and 1". (Specify combination desired). ‡See Note	2⅛"	29.9	71	50
	FOR UTILITY BOX—4" Long, 2⅛" Wide, 1⅞" Deep				
59361	KO's: Eight ½" in sides and ends.....	1⅞"	14.0	44	50



55151



73171



53171



59361

‡Extension rings — all combination KO's and 1" KO's discontinued.

Galvanized finish is employed.

STEEL CITY ELECTRIC COMPANY MARK OF QUALITY

4" SQUARE BOXES AND COVERS

Boxes with and without Brackets

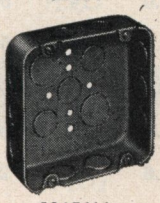
All 4" square boxes are now furnished with double lugs for reversing covers. For boxes installed with single lugs, double lugs and additional screws can be furnished free of charge, to eliminate the necessity of drilling extra holes in covers or changing boxes around.



52151

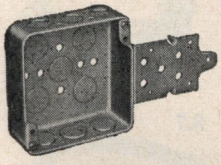


52141



52171½

Cat. No.	Description	Deep	Wiring Cu. In. Cap.	Approx. Weight Lb. per 100	Std. Pkg. Quantity
52151-½	KO's for ½": 10 in sides, 5 in bottom.....	1½"	21.1	72	50
52151-¾	KO's for ¾": 8 in sides, 2 in bottom. ½": 3 in bottom.....	1½"	21.1	72	50
52151-½ & ¾	KO's: Eight ½" and four ¾" in sides, three ½" and two ¾" in bottom.....	1½"	21.1	72	50
52141-½	KO's for ½": 10 in sides, 5 in bottom.	1¼"	17.6	62	50
52171-½	KO's for ½": 10 in sides, 3 in bottom, two ¾" in bottoms.....	2⅛"	29.9	90	50
52171-¾	KO's for ¾": 8 in sides, 2 in bottom. ½": 3 in bottom.....	2⅛"	29.9	90	50
52171-½ & ¾	KO's for ¾": 4 in sides, 2 in bottom. For ½": 8 in sides, 3 in bottom.....	2⅛"	29.9	90	50
52171-1	KO's for 1": 8 in sides. Two ¾" and three ½" in bottom.....	2⅛"	29.9	90	50
52171-1¼	KO's: 6 1¼" in sides. Two ¾" and three ½" in bottom.....	2⅛"	29.9	90	50



52151-B½

WITH MOUNTING BRACKETS

52151-B-½	KO's for ½": 8 in 3 sides, 5 in bottom....	1½"	21.1	85	50
52151-B-¾	KO's for ¾": 6 in 3 sides, 2 in bottom. For ½": 3 in bottom.....	1½"	21.1	85	50
52151B ½&¾	KO's: Six ½" and three ¾" in 3 sides. Three ½" and two ¾" in bottom.....	1½"	21.1	85	50
52151-V ½	½" KO: Eight in sides, five in bottom.....	1½"	21.1	78	50
52151-V ¾	KO's: Six ¾" in sides, two ¾" and three ½" in bottom.....	1½"	21.1	78	50
52151-V ½&¾	KO's: Six ½" and three ¾" in sides, three ½" and two ¾" in bottom.....	1½"	21.1	78	50



52-C-0



52-C-1



52-C-3

COVERS FOR 4" SQUARE BOXES

52-C-0	Flat for single rectangular switch or receptacle...	.0	24	50
52-C-1	Flat Blank	.0	33	100
52-C-2	Blank—raised ⅝"	3.7	41	100
52-C-3	Raised ⅝" high open with ears drilled and tapped, $2\frac{23}{32}$" on center to take 3¼" cover or box cover receptacles.	3.7	29	50

Galvanized finish is employed.

STEEL CITY ELECTRIC COMPANY MARK OF QUALITY

COVERS FOR 4″ SQUARE BOXES—Continued

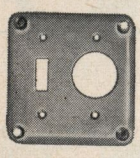

52-C-7

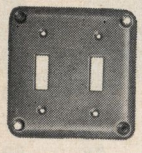

52-C-10

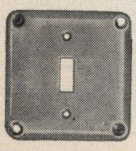

52-C-17

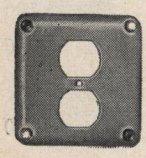

52-C-21


52-C-35


RS-1


RS-5


RS-9


RS-12

Cat. No.	Description	Wiring Cu. In. Cap.	Approx. Weight Lb. per 100	Std. Pkg. Quantity
52-C-3-1	Same as 52-C-3 except raised 1″	5.9	36	25
52-C-3-1¼	Same as 52-C-3 except raised 1¼″	7.4	40	25
52-C-6	Flat with ½″ knockout in center	.0	33	100
52-C-7	Raised ⅝″; ½″ knockout in center	3.7	41	100
52-C-10	Offset, raised ¼″, keyed for plaster. For single switch or receptacle. For use on any 4″ square box or ring but particularly for use on X1¼″ and X1½″ shallow partition Wall Box	1.2	24	50
52-C-12	Drop cord with ⅜″ metal bushing—raised ⅝″	3.7	41	50
52-C-62	For single rectangular base switch or receptacle—raised ¼″	1.2	23	50
52-C-13	For single rectangular base switch or receptacle—raised ½″	2.4	29	50
52-C-14	For single rectangular base switch or receptacle—raised ¾″	3.6	34	50
52-C-15	For single rectangular base switch or receptacle—raised 1″	4.8	36	25
52-C-16	For single rectangular base switch or receptacle—raised 1¼″	6.0	42	25
52-C-00	4″ square flat for two rectangular switches or receptacles	.0	14	50
52-C-20	For 2 rectangular base switches or receptacles—raised ¼″	2.4	14	50
52-C-17	For 2 rectangular base switches or receptacles—raised ½″	4.8	19	50
52-C-18	For 2 rectangular base switches or receptacles—raised ¾″	7.2	26	50
52-C-19	For 2 rectangular base switches or receptacles—raised 1″	9.6	32	25
52-C-21	For 2 rectangular base switches or receptacles—raised 1¼″	12.0	40	25
52-C-28	For 5 and 10-ampere snap switches, wall receptacles, etc., with bolts and nuts for fastening fittings to cover; slots give range of centers ⅞″ to 1⅞″	.0	31	100
52-C-35	For sign receptacles; raised ⅝″; 1½″ opening with keyed lug for sign receptacle	3.7	38	50
52-C-48	With 2¾″ opening; raised ⅝″	3.7	29	100

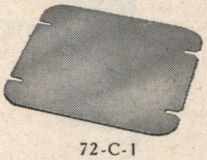
4″ SQUARE COVERS FOR RED SEAL WORK

Made of stamped steel—galvanized.

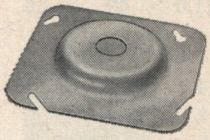
Cat. No.	Description	Deep	Approx. Weight Lb. per 100	Std. Pkg. Quantity
RS-1	For 1 toggle switch and 1 receptacle	½″	35	50
RS-2	For 1 toggle switch and 1 flush duplex receptacle.	½″	32	50
RS-5	For 2 square handle toggle switches	½″	37	50
RS-8	For 2 duplex receptacles	½″	28	50
RS-9	For 1 square handle toggle switch	½″	38	50
RS-11	For 1 single flush receptacle	½″	35	50
RS-12	For 1 duplex receptacle	½″	33	50

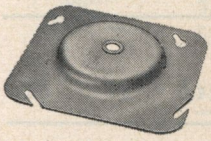
STEEL CITY ELECTRIC COMPANY MARK OF QUALITY

4-11/16" SQUARE BOXES AND COVERS
GALVANIZED ONLY


72-C-1


72-C-3


72-C-7


72-C-12


72-C-14


72-C-18

Cat. No.	Description	Deep	Wiring Cu. In. Cap.	Approx. Weight Lb. per 100	Std. Pkg. Quantity
72151 ½	KO's for ½": 10 in sides, 3 in bottom, & 2-¾"	1½"	30.0	88	25
72151 ¾	KO's for ¾": 8 in sides, 2 in bottom. For ½": 3 in bottom	1½"	30.0	88	25
72151 ½ & ¾	KO's: 8 for ½" and 4 for ¾" in sides; 3 for ½" and 2 for ¾" in bottom	1½"	30.0	88	25
72171 ½	KO's for ½": 10 in sides, 5 in bottom	2⅛"	42.0	118	25
72171 ¾	KO's for ¾": 8 in sides, 2 in bottom. For ½": 3 in bottom	2⅛"	42.0	118	25
72171 ½ & ¾	KO's: 8 for ½" and 4 for ¾" in sides, 3 for ½" and 2 for ¾" in bottom	2⅛"	42.0	118	25
72171 1	KO's for 1": 8 in sides. 3 for ½" and 2 for ¾" in bottom	2⅛"	42.0	118	25
72171 ¾ & 1	KO's: four ¾" and four 1" in sides. Three ½" and two ¾" in bottom	2⅛"	42.0	118	25
72171 1¼	KO's: 6 for 1¼" in sides. 3 for ½" and 2 for ¾" in bottom	2⅛"	42.0	118	25

COVERS FOR 4-11/16" SQUARE BOXES

72-C-1	Flat blank	.0	45	25
72-C-2	Blank—raised ⅝"	3.7	54	25
72-C-3	Open with ears drilled 2-23/32" on centers to take 3¼" box cover receptacles or covers—raised ⅝".	3.7	40	25
72-C-6	Flat with ½" KO in center	.0	44	25
72-C-7	Raised ⅝" with ½" KO	3.7	52	25
72-C-12	Drop cord with ⅜" metal bushing	3.7	50	25
72-C-14	For single rectangular base switch or receptacle—raised ¾"	3.6	48	25
72-C-15	For single rectangular base switch or receptacle—raised 1"	4.8	52	25
72-C-17	For two rectangular base switches or receptacles—raised ½"—2 devices	4.8	32	25
72-C-18	For two rectangular base switches or receptacles—raised ¾"	7.2	40	25
72-C-48	Raised ⅝" with 2¾" opening	3.7	40	25

CONCRETE BOX RINGS AND PLATES
Made of stamped steel—galvanized

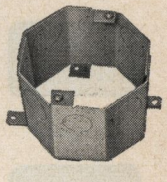
RINGS ONLY

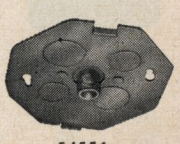
Cat. No.	SIZE Deep	SIZE Diam.	Wiring Cu. In. Cap.	Approx. Weight Lb. per 100	Std. Pkg. Quantity
54531	2"	4"	25.0	64	50
54541	2½"	4"	31.0	77	50
54551	3"	4"	37.0	88	25
54561	3½"	4"	43.0	110	20
54571	4"	4"	49.0	123	20
54581	5"	4"	62.0	150	20
54591	6"	4"	74.0	170	20

PLATES ONLY FOR CONCRETE BOXES

Plain Plates with three ½" and two ¾" knockouts.

Cat. No.	SIZE	Wiring Cu. In. Cap.	Approx. Weight per Lb. 100	Std. Pkg. Quantity
CBP	Plain	.0	33	50
CBP-⅜"	⅜" stud	.0	37	50
CBP-½"	½" stud	.0	48	50



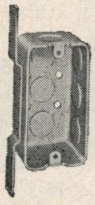

54551

STEEL CITY ELECTRIC COMPANY MARK OF QUALITY

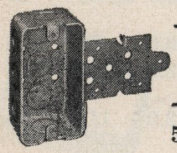
UTILITY BOXES AND COVERS

Boxes With and Without Brackets and Lath Supports

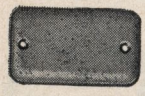
Stamped Steel. Holes in ears 3-9/32" on centers to accommodate all standard receptacles, switches, etc. Holes in bottom for fixture studs and nails.



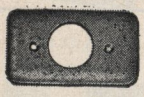
58361-V



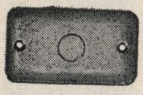
58361-B



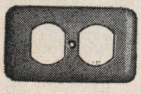
58-C-1



58-C-5



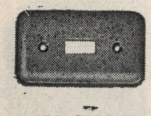
58-C-6



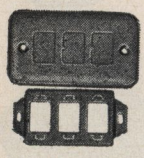
58-C-7



58-C-11



58-C-30



58-C-40

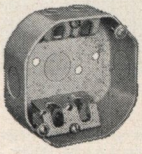
Cat. No.	Description	Deep	Wide	Long	Wiring Cu. In. Cap.	Approx. Weight Lb. per 100	Std. Pkg. Quantity
58351½	KO's for ½": 3 each side, 1 each end, 3 bottom	1½"	2⅛"	4"	11.0	49	50
58361½	KO's for ½": 3 each side, 1 each end, 3 bottom. When specified, two ¾" each side and bottom, 1 each end	1⅞"	2⅛"	4"	14.0	55	50
58371½	KO's for ½": 3 each side, 1 each end, 3 bottom. For ¾": two each side and bottom, one each end	2⅛"	2⅛"	4"	16.0	60	50
	EXTENSION RINGS						
59361	KO's: Eight ½" in sides and ends	1⅞"	2⅛"	4"	14.0	44	50
	UTILITY BOXES WITH BRACKETS						
58361-B	KO's for ½": 3 one side, 1 each end, 3 bottom. When specified, two ¾" one side and bottom, 1 each end. Without Lath support	1⅞"	2⅛"	4"	14.0	70	50
58361-V	Utility Outlet Box. ½" KO's: three one side, one each end, three in bottom. (Can be furnished with ¾" KO's: two one side and bottom, one each end. Galvanized only. No lath support)	1⅞"	2⅛"	4"	14.0	65	50
58371-T	KO's for ½": 3 one side, 1 each end, 3 bottom, no Lath support	2⅛"	2⅛"	4"	16.0	75	50
	COVERS FOR UTILITY BOXES **Packed in Individual Envelopes**						
58-C-1	Blank	⅛"	2⅛"	4"	.0	15	100
58-C-5	Single receptacle	⅛"	2⅛"	4"	.0	13	20
58-C-6	With ½" knockout	⅛"	2⅛"	4"	.0	15	100
58-C-7	Duplex receptacle	⅛"	2⅛"	4"	.0	11	100
58-C-11	With ⅜" metal bushing	⅛"	2⅛"	4"	.0	15	20
58-C-30	Toggle switch	⅛"	2⅛"	4"	.0	15	100
58-C-40	With 3-hole strap for "Despard" type wiring devices. Has three knockouts so that one, two or three devices may be used in a single-gang cover by removing knockouts to be utilized	⅛"	2⅛"	4"	.0	20	20

Galvanized finish is employed.

MARK OF QUALITY STEEL CITY ELECTRIC COMPANY

COMBINATION BOXES AND ASSEMBLIES

Made of pressed steel—galvanized. All boxes have holes in bottom for fixture studs and nails.

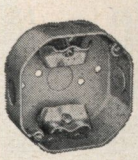


54151-A

Cat. No.	Description	Diam.	Deep	Wiring Cu. In. Cap.	Approx. Weight Lb. per 100	Std. Pkg. Quantity
	FOR ARMORED CABLE—Octagon Boxes With Lugs					
	21/32" pri-outs; four in sides, four in bottom; KO's for ½" conduit: one in two sides, one in bottom.					
24151-X	C 12 clamps	3½"	1½"	12.2	55	50
24151-XS	⅜" stud C 12 clamps	3½"	1½"	12.2	58	50
54151-A	CA-1-clamps	4"	1½"	16.5	63	50
54151-AS	⅜" stud CA-1-clamps	4"	1½"	16.5	67	50
	Round Boxes With Lugs					
	Four 21/32" pri-outs and KO for ½" conduit. Bushing plates. C-10 clamps. Galvanized only.					
36125-X		3¼"	¾"	5.7	38	50
36125-XS	⅜" stud	3¼"	¾"	5.7	40	50
	FOR NON-METALLIC SHEATHED CABLE					
	21/32" pri-outs; four in sides, four in bottom; KO's for ½" conduit: one in two sides, one in bottom.					
24151-N	CN-1 clamps	3½"	1½"	12.2	51	50
24151-NS	CN-1 clamps, ⅜" fix. stud	3½"	1½"	12.2	55	50
54151-N	CN-1 clamps	4"	1½"	16.5	61	50
54151-NS	CN-1 clamps, ⅜" fix. stud	4"	1½"	16.5	64	50
	Four 21/32" pri-outs and KO for ½" conduit. C-10 clamps. Galvanized only.					
36125-D		3¼"	¾"	5.7	34	50
36125-DS	⅜" stud	3¼"	¾"	5.7	37	50



36125-XS



54151-N

STEEL CITY ELECTRIC COMPANY MARK OF QUALITY

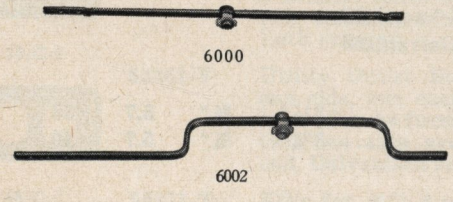
COMBINATION BOXES AND BAR-SETS

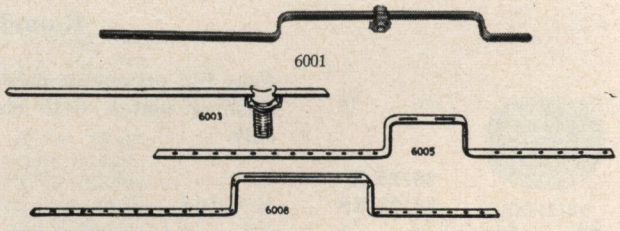
Galvanized. Mounted on shallow offset bar.
Can also be furnished on deep offset bar.



Cat. No.	Description	Dia.	Deep	Wiring Cu. In. Cap.	Approx. Weight Lb. per 100	Std. Pkg. Quantity
	FOR FLEXIBLE METALLIC CONDUIT					
24151-XSB	C-12 clamps, ⅜" stud	3½"	1½"	12.2	112	25
54151-ASB	CA-1 clamps, ⅜" stud	4"	1½"	16.5	120	25
	FOR NON-METALLIC SHEATHED CABLE					
24151-NSB	CN-1 clamps, ⅜" stud	3½"	1½"	12.2	104	25
54151-NSB	CN-1 clamps, ⅜" stud	4"	1½"	16.5	120	25
	FOR RIGID METALLIC CONDUIT					
	Octagon Boxes. KO's for ½" conduit: four in sides.					
24151-SB	⅜" stud	3¼"	1½"	10.6	98	25
54151-SB	⅜" stud	4"	1½"	16.5	110	25

BAR HANGERS





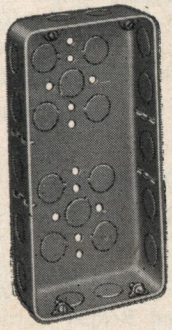
ALL BAR HANGER STUDS ARE FURNISHED WITH ⅜" WING NUT.

Cat. No.	Description	Length of Bar	Length of Offset	Approx. Depth of Offset	Approx. Weight Lb. per 100	Std. Pkg. Quantity
6000	Straight	18"	....	....	55	50
6000A	Straight	26"	....	....	64	50
6001	Shallow offset	18"	9"	15/16"	61	50
6001A	Shallow offset	26"	13"	15/16"	66	50
6002	Deep offset	18"	9"	1 9/16"	63	50
6002A	Deep offset	26"	13"	1 9/16"	68	50
6003	Straight—old work	12"	....	....	43	100
6005	Offset cleat	21"	4"	1 9/16"	56	50
6008	Offset cleat—continuous slot for adjustment	21"	7"	1⅝"	46	50

MARK OF QUALITY STEEL CITY ELECTRIC COMPANY

GANG BOXES, COVERS AND PARTITIONS

Made of 14-gauge steel—galvanized. Boxes made with slots for installing partitions (barriers) for separating low and high tension wires. Holes in bottom for fixture studs and nails. In addition to knockouts specified, all boxes have two knockouts in each end for either ½" or ¾" conduit.



3G
Regular 3-Gang Box with Slots For Partitions

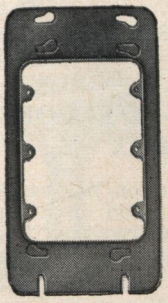
Cat. No.	Knockouts Each Side	Outside Length	No. of Gangs	Wiring Cu. In. Cap.	Approx. Weight Lb. per 100	Std. Pkg. Quantity
		REGULAR GANG BOXES				
2-G		6 13/16"	2	50.0	136	5
3-G		8 5/8"	3	62.0	161	5
4-G	1 5/8" deep, 4½" wide furnished with	10 7/16"	4	74.0	190	5
5-G	½", ¾" or combination ½" and ¾"	12¼"	5	86.0	220	5
6-G	KO's. Specify KO's desired, otherwise	14 1/16"	6	98.0	240	1
7-G	½" will be furnished.	15 7/8"	7	110.0	300	1
8-G		17 11/16"	8	122.0	350	1
9-G		19½"	9	134.0	395	1
		DEEP GANG BOXES				
H-2-BD	2½" deep, 4½" wide, furnished with	6 13/16"	2	71.4	156	5
H-3-BD	½", ¾" or 1" KO's, or combination ½"	8 5/8"	3	88.5	195	5
H-4-BD	and ¾" or ¾" and 1". Specify KO's	10 7/16"	4	105.7	230	5
H-5-BD	desired, otherwise ½" will be furnished.	12¼"	5	122.8	280	5
H-6-BD		14 1/16"	6	140.0	300	1



H-3-BD
Deep 3-Gang Box Showing One Partition Installed

		PARTITIONS FOR GANG BOXES				
SGP	Low voltage partition for 1 5/8" deep box.....		....		20	Any
DGP	Low voltage partition for 2½" deep box.....		....		25	Quantity

		COVERS FOR GANG BOXES				
		Deep	Wide	Long		
2-GC	Holes in ears spaced 3 3/32" on	13/16"	4 1/16"	7"	9.0	56	5
3-GC	centers to accommodate all	13/16"	4 1/16"	8 13/16"	14.0	64	5
4-GC	standard receptacles, switches, etc.	13/16"	4 1/16"	10 5/8"	19.0	70	5
5-GC	Holes in ears spaced 1 13/16" on centers between gangs. Curved	13/16"	4 1/16"	12 7/16"	24.0	80	5
6-GC	slots permit perfect adjustment without removing screws. Are	13/16"	4 1/16"	14¼"	29.0	90	1
7-GC	furnished with extra slotted screw holes plugged, and situated so to fit the next smaller box, i.e., No. 4GC cover will fit both No. 4G and 3G boxes. Each gang box will therefore take the next largest cover.	13/16"	4 1/16"	16⅛"	34.0	111	1
8-GC		13/16"	4 1/16"	18⅞"	39.0	136	1
9-GC		13/16"	4 1/16"	19 11/16"	44.0	148	1
10-GC		13/16"	4 1/16"	19 11/16"	49.0	148	1



3-GC

"LATROBE" PRODUCTS

FULLMAN MANUFACTURING COMPANY

No. 100 "LATROBE" NON-ADJUSTABLE WATERTIGHT BOX



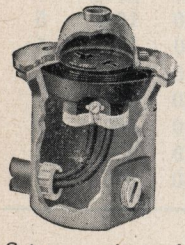
No. 100 Box with No. 206 Nozzle.

This box is furnished complete with No. 206 Stem Nozzle but without Receptacle. Cover Plate is 3½" diameter with ½" Flush Brass Plug. Used as a Telephone Outlet or as a Junction Box. May be ordered without Stem Nozzle if desired.

List Price, each.....$4.55

No. 100 less No. 206 Nozzle.. 3.90

No. 110 "LATROBE" NON-ADJUSTABLE WATERTIGHT BOX

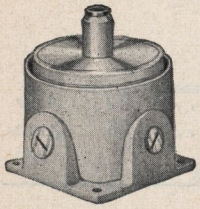


Cutaway view of No. 110 Box showing how the tapered unit receptacle fits tapered opening in top of box body.

The No. 110 Box represents the "last word" in unique design, neat appearance, fewest parts and least amount of labor to install. No. 208 Receptacle is designed to eliminate the use of fussy small screws, receptacle straps, filler plates, complicated assembly, etc. Simply attach the wires to the Receptacle, fasten on the Cover Plate and the Receptacle is ready for use. Saves 15 to 20 minutes installation time. Cover Plates are 3½" diameter.

List price with Receptacle and Bell Nozzle $5.20

No. 120 "LATROBE" ADJUSTABLE WATERTIGHT FLOOR BOX



No. 120 Box with No. 206 Stem Nozzle.

Designed for telephone outlet or where permanent connections are made, or as a junction box. Adjustable top with Brass Edge Ring insures Cover being absolutely flush with finished floor in fireproof construction. Cover Plates are 3½" diameter, same as furnished with No. 100 Boxes.

List price, 120 floor box.....$8.60
List price, No. 206 Nozzle..... 1.30

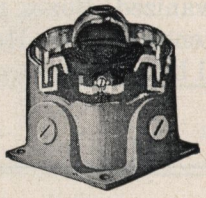
No. 330 "LATROBE" TOM THUMB UTILITY OUTLET



For use in wood floors, baseboards, etc., and other installations free from moisture or mechanical injury. Specially designed to furnish a neat, compact general purpose outlet. No. superfluous parts to lose—easy to install without special tools.

2½" dia. 2" high.....List each $1.65

No. 130 "LATROBE" ADJUSTABLE WATERTIGHT FLOOR BOX



No. 130 Box with No. 207 Bell Nozzle. Cutaway illustrates how tapered unit receptacle fits tapered opening in adjusting Ring.

The No. 130 Box is the only one on the market furnished complete with Receptacle at the factory. Receptacles are guaranteed against breakage and design eliminates many small fussy parts. Cover Plates 3½" diameter same as furnished with 110 Boxes.

List price floor box.....$9.25

List price, No. 207 Nozzle 1.30

No. 251 "LATROBE" ADJUSTABLE WATERTIGHT FLOOR BOX

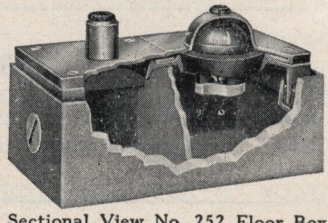


Sectional View No. 251 Floor Box with No. 207 Nozzle. and No. 208 Regular

The No. 251 Box is square and similar in design to the No. 120 and No. 130 round Boxes. Cover Plates are 3½" square and interchangeable with covers of gang boxes. Recommended for use with gang boxes as covers harmonize in size and appearance. Flat sides permit several conduit holes in each side if required.

List Price, No. 251 with ½" Plug in Cover....$11.05
List Price, No. 251 with Receptacle and 2" Plug in Cover $11.70

"LATROBE" GANG FLOOR BOXES



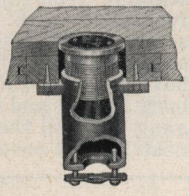
Sectional View No. 252 Floor Box with No. 206 and 207 Nozzle.

"Latrobe" Gang Floor Boxes are similar in design to the No. 251 Single Square Boxes and are furnished with interchangeable 3½" square covers. One or more sections can be furnished with No. 208 Receptacles. Partitions between sections to separate low and high tension wires. Three and four gang Boxes are furnished.

List price per section, with ½" Plug in Cover Plate. $9.00

List Price, per section, with No. 208 Receptacle and 2" Plug in Cover Plate.....$9.50

No. 300 "LATROBE" MIDGET FLOOR RECEPTACLE AND BOX



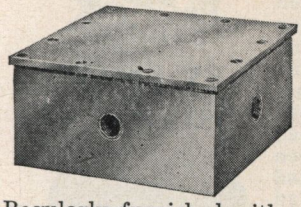
The only Flush- Non-Watertight Floor receptacle and Box approved by the Underwriters' Laboratories for installation in wood floors.

(Only 2" diameter)

List each $3.25

"LATROBE" PRODUCTS

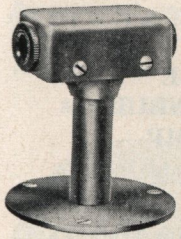
FULLMAN MANUFACTURING COMPANY



CAST IRON JUNCTION BOXES UNFLANGED

Regularly furnished with cast iron cover plates and assembled with rubber gaskets and brass screws. (Cadmium Plated.)

Size (Inches) Width		Length		Height	Wall Thickness	Price
3	x	4	x	2½	3/16	Upon Request
3	x	5	x	2½	3/16	Upon Request
4	x	4	x	2½	3/16	Upon Request
4	x	5	x	3½	3/16	Upon Request
6	x	6	x	4	¼	Upon Request
6	x	7	x	5½	¼	Upon Request
6	x	10	x	4	¼	Upon Request
7	x	8	x	5½	¼	Upon Request
8	x	8	x	4	¼	Upon Request
8	x	10	x	6½	⅜	Upon Request
10	x	12	x	6¾	⅜	Upon Request
12	x	12	x	4	⅜	Upon Request
12	x	12	x	6	⅜	Upon Request
12	x	14	x	6¾	½	Upon Request
14	x	16	x	6¾	½	Upon Request



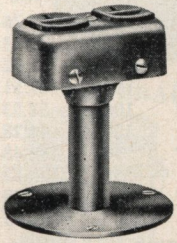
No. 283 Nozzle in No. 200 Cover Plate

No. 283 DUPLEX TELEPHONE NOZZLE

With ½" brass pipe extension. This design provides sufficient space for splices, etc., without removing Cover Plate of Floor Box. Can also be furnished with ¾" pipe extension if required. Cover Plate not included.

Approximate Weight ...9 oz. each

List Price $4.30



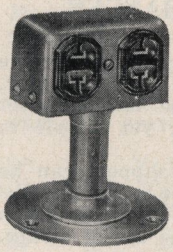
No. 284 Nozzle in No. 200 Cover Plate

No. 284 DUPLEX RECEPTACLE NOZZLE

With ½" brass pipe extension Neatest and most compact fitting on the market. Can also be furnished with ¾" pipe extension if required. Cover Plate not included. Also see illustration of No. 295 Nozzle on this Page.

Approximate Weight ..10 oz. each

List Price $9.75

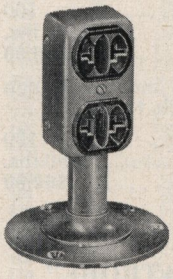


No. 284-S DUPLEX RECEPTACLE NOZZLE

With ½" brass pipe extension. Similar to No. 284 except that the receptacle is located on the side of the nozzle. Can also be furnished with ¾" pipe extension if required. Cover Plate not included.

Approximate Weight ..10 oz. each

List Price $9.75

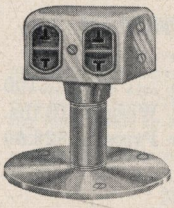


No. 284-V DUPLEX RECEPTACLE NOZZLE

With ½" brass pipe extension. Vertical mounting of this receptacle permits its installation in places too small for any other duplex receptacle nozzle. Cover Plate not included.

Approximate Weight ...10 oz. each

List Price $9.75



No. 285 Nozzle in No. 200 Cover Plate

No. 285 DOUBLE DUPLEX RECEPTACLE NOZZLE

With ½" brass pipe extension. Neatest and most compact Double Duplex Nozzle on the market. Can also be furnished with ¾" pipe extension if required. Cover Plate not included.

Approximate Weight ...15 oz. each

List Price $11.25



Specify "Keystone" for strength and safety. Made of finest flat steel wire properly tempered to give the desired stiffness and springiness. Seven sizes ranging for the lightest work up to the heaviest power wiring. Put up standard in 100, 150 and 200 foot coils in strong cartons. Shorter or longer lengths furnished if required.

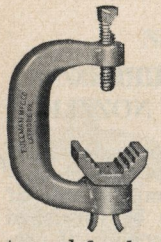
List Prices per 100 feet

No. 500	⅛"	x .030"	$2.43
No. 501	3/16"	x .030"	3.61
No. 502	¼"	x .030"	4.42
No. 600	⅛"	x .060"	3.61
No. 601	3/16"	x .060"	4.42
No. 602	¼"	x .060"	5.54
No. 604	⅜"	x .060"	9.75

Each Coil Packed In A Strong Carton.

"LATROBE" PRODUCTS

FULLMAN MANUFACTURING COMPANY



"LATROBE" PIPE OR CONDUIT HANGER

Made of highest grade malleable iron, cadmium plated to prevent rust, with cup point, case hardened set screw, it is sturdy, yet simple in design.

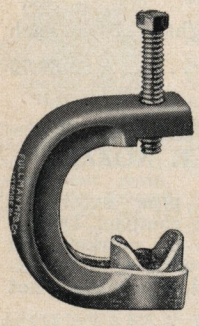
The saddle or pipe support can be turned freely, thereby permitting pipe to run parallel to the beam or at angles, making any installation easy and eliminating drilling and the use of straps.

The No. 471 hanger is used for hanging 1 1-4 inch and 1 1-2 inch pipe to steel beams ⅜ inch thick.

Standard Package 100
Standard Package Weight.....70 lbs.
Standard Package Price.....$80.00

No. 470 —For hanging 1-2 inch, 3-4 inch or 1 inch pipe or conduit to steel beams ⅜ inch thick.

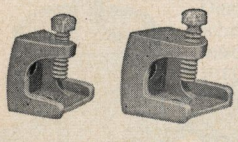
Standard Package 100
Standard Package Weight .....50 lbs.
Standard Package Price $60.00



No. 480 "LATROBE" ARMORED CABLE SUPPORT

Standard Package 100
Standard Package Weight.18 lbs.
Standard Package Price...$26.00

"LATROBE" INSULATOR SUPPORT

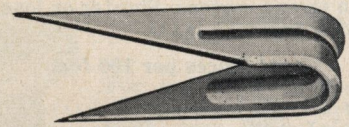


"Latrobe" Insulator Supports are malleable iron clamps of high tensile strength for fastening porcelain and glass insulators to exposed steel framework.

Four sizes to accommodate all standard porcelain or glass insulators.

LIST PRICE PER 100

No. 400 1" size .....$ 30.00
No. 401 1½" size 45.00
No. 402 2" size 70.00
No. 403 2½" size 105.00



No. 1050 ROMEX STAPLE

Size ½"x1"

500 per box, 5 to carton (wt. 20 lbs.) ... $4.20 per M
100 per box, 25 to carton (wt. 21 lbs.).. $4.65 per M
10,000 per keg (wt. 82 lbs.) .....$23.10 per keg

F.O.B. Latrobe, Pa. with rail freight up to $2.75 per cwt. allowed on quantities of 50,000 or more.



No. 1040 "LATROBE" BX CABLE STAPLE

Size ⅝"x1⅜"

500 per box, 5 to carton (wt. 34 lb.)... $5.50 per M
100 per box, 25 to carton (wt. 35 lb.).... $7.60 per M
2,500 per carton (wt. 33 lb.) ..... $5.80 per M
6,000 per keg (wt. 88 lb.) ..... $17.90 per keg

F.O.B. Latrobe, Pa. with freight allowed up to $2.75 per cwt. on shipments of 50,000 staples or more.



No. 1020 BX STAPLE ROUND WIRE WITH FLAT HEAD

Size ⅝"x1¼"

500 per box .....$ 2.80 per M
10,000 per keg ..... 26.25 per keg

F.O.B. Latrobe, Pa. with freight allowed up to $2.75 per cwt. on shipments of 50,000 staples or more.

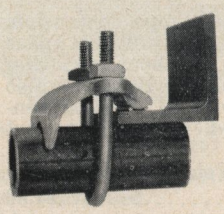


No. 1030 ROMEX STAPLE ROUND WIRE WITH FLAT HEAD

Size ½"x1½"

500 per box .....$ 2.75 per M
100 per box ..... 3.25 per M
10,000 per keg ..... 21.75 per keg

F.O.B. Latrobe, Pa., with freight allowed up to $2.75 per cwt. on quantities of 50,000 or more.



"LATROBE" PIPE OR CONDUIT LAMP

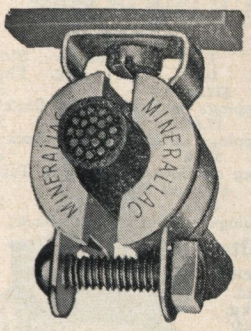
A new clamp with a double bite—Two models — right angle and parallel support — 10 sizes in each.

RIGHT ANGLE TYPE			PARALLEL TYPE		
Standard Pipe Size	Standard Package	Standard Package Price	Standard Pipe Size	Standard Package	Standard Package Price
800—½"	100	$34.45	900—½"	100	$37.76
805—¾"	100	35.75	905—¾"	100	39.13
810—1"	100	38.28	910—1"	100	41.92
815—1¼"	100	43.35	915—1¼"	100	47.51
820—1½"	100	49.72	920—1½"	100	54.53
825—2"	100	58.63	925—2"	100	64.28
830—2½"	50	75.20	930—2½"	50	82.48
835—3"	50	91.78	935—3"	50	100.62
940—3½"	50	112.19	940—3½"	50	122.98
845—4"	50	127.46	945—4"	50	139.75

NOTE: All "Latrobe" Pipe or Conduit Clamp shipments F.O.B. Latrobe, Pa., with Freight allowance up to $2.75 per cwt. on shipments of 100 lbs. or more.

MINERALLAC ELECTRIC SPECIALTIES

THE MINERALLAC CABLE OR CONDUIT HANGER



Made of Zinc-Plated Steel or Everdur Metal and are much stronger than cast iron hangers for the same purpose. They are easily and quickly put in place, so open wiring, conduit and cable may be run with greater rapidity and be more compactly arranged than by the use of other hangers. These hangers have been approved by the Underwriters' Laboratories for use on circuits up to 300 volts when mounted directly on the surface wired over. For voltages from 300 to 550 volts these hangers must be installed with spacers under the base of the hanger or mounted on metal racks or brackets so as to hold the conductors at least 1 inch from the surface wired over. For voltages above 550 volts the hangers should be used with an appropriate insulating bushing having necessary dielectric strength, the hangers being mounted on metal racks or brackets to hold the conductors far enough from the surface wired over to preserve the required electrical clearance.

Mfrs. No.	Cond. Size Rigid	Thin Wall	Std. Pkg.	Price Std. Pkg. *Steel	Everdur
0	3/8/1/2	1/2	100	$ 4.50	$13.50
1	3/4	3/4	100	5.00	15.00
2	1	1	100	6.65	19.95
2½		1¼	100	7.00	21.00
3	1¼	1½	100	7.25	21.75
4	1½		100	8.95	31.50
5	2		50	9.65	40.00
6	2½		50	10.70	47.15
7	3		25	11.95	51.00
8	3½		25	14.00	56.00

Minerallac Hanger made in both Steel and Everdur.

Everdur Conduit is furnished in same dimensions as Steel Rigid and Thin Wall.

* Prices are for Zinc Plated.

Prices do not include stove bolts.

Recommended size of stove bolts.

#0	¼" x ¾"
#1-#3	¼" x 1 "
#4-#6	¼" x 1¼"

MINERALLAC INSULATING COMPOUNDS



No. 78. Cable Joint or Pothead Compound. Dense and very adhesive, with little shrinkage. Recommended as an all-purpose insulating material. Low moisture absorption; pliable. Recommended for voltages 200 and up. Melting point 90 degrees Centigrade. Dielectric strength 940 volts per mil at 30 degrees Centigrade.

MINERALLAC "PULL-IN" COMPOUND

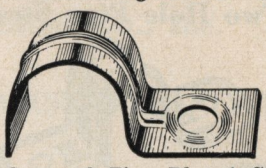


For Rubber Covered Wires and Cables

LISTED BY UNDERWRITERS

12 pints (per case)....	15	$ .50 per can
12 quarts (per case)..	27½	.85 per can
½ gallon (6 per case)	27	1.50 per can
1 gallon (1 per case).	52	2.00 per can
5 gallon	42	8.25 per can
50 gallon drums	450	1.60 per gal.

STANDARD JIFFY CLIPS

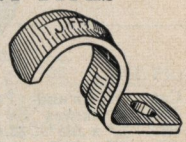


Made in Everdur and Zinc Plated Steel this is a substantial clamp for hanging pipe, conduit and lead covered cables. Only one screw or bolt is required, affords great strength, by having ribs drawn in the clip. A round boss serves the purpose of a lock washer to prevent the clip from working loose.

Cat. No.	Fits	Marking On Clip	STEEL Per 100	STEEL Lbs. Pkg.	EVERDUR Per 100	EVERDUR Lbs. Pkg.	Std. Pkg.
(For Copper Tube)							
102	1/8"	125	$ .80	2.5	$2.65	3.25	500
103	3/16"	—	.85	2.5	2.75	3.25	500
105	¼"	250	.90	3	2.80	3.9	500
110	5/16"	312	1.00	3.5	2.90	4.25	500
115	3/8"	375	1.15	7	3.00	9.1	500
125	½"	¼"	1.40	7.5	3.80	9.75	500
130	5/8"	3/8"	1.65	5.4	6.00	7	200
135	¾"	750	1.70	2.7	6.60	3.5	100
150	1"	¾"	2.50	4.3	9.80	5.59	100
165	1½"	1¼"TW	4.25	9	19.00	11.7	100
(For Thin Wall Conduit)							
130	½"	3/8"	1.65	5.4	6.00	7	200
145	¾"	¾" TW	2.20	4.2	8.70	5.46	100
155	1"	1" TW	3.05	4.7	13.10	6.11	100
165	1¼"	1¼" TW	4.25	9	19.00	11.7	100
175	1½"	1½" TW	5.50	13	23.00	16.9	100
(For Rigid Conduit or Pipe)							
120	1/8"	1/8"	1.25	7	3.25	9.1	500
125	¼"	¼"	1.40	7.5	3.80	9.75	500
130	3/8"	3/8"	1.65	5.4	6.00	7	200
140	½"	½"	1.75	4	7.55	5.2	100
150	¾"	¾"	2.50	4.3	9.80	5.59	100
160	1"	1"	3.70	8	16.30	10.4	100
170	1¼"	1¼"	4.90	12.5	21.75	16.25	100
(For BX)							
125	BX	¼"	1.40	7.5	3.80	9.75	500
135	6/3	750	1.70	2.7	6.60	3.5	100

MEDIUM and HEAVY DUTY TYPES

These clips have an inverted rib which provides more strength at the bend of clip. Inverted rib also provides "Snap On" feature which holds the clip on conduit, allowing both hands to be free to align and fasten clip to structure either with screws, Minerallac Pin Bolts or welding.



MEDIUM JIFFY CLIPS

Cat. No.	Fits	Zinc-Plated Per 100	Lbs. Per Pkg.	Hot Dipped Galvanized Per 100	Lbs. Per Pkg.	Gauge	Std. Pkg.
(For Thin Wall Conduit)							
MED-30	½"	$2.45	5.7	$2.90	6	.083"x7/8"	100
MED-45	¾"	3.00	6.8	3.50	7.1	.083"x7/8"	100
MED-55	1"	3.70	8.2	4.35	8.5	.083"x7/8"	100
MED-65	1¼"	5.10	12.2	5.75	12.5	.095"x1"	100
MED-75	1½"	6.75	8	7.50	8.5	.095"x1"	50
MED-85	2"	8.75	12	10.50	12.5	.095"x1¼"	50
(For Rigid Conduit or Pipe)							
MED-40	½"	2.85	6.5	3.35	6.8	.083"x7/8"	100
MED-50	¾"	3.25	7.5	3.85	7.8	.083x7/8"	100
MED-60	1"	4.25	9	4.95	9.3	.083"x7/8"	100
MED-70	1¼"	6.00	13	6.75	13.3	.095"x1"	100
MED-80	1½"	8.50	10.5	10.25	12	.125"x1"	50
MED-90	2"	9.35	12.5	11.65	14	.125"x1¼"	50

HEAVY DUTY JIFFY CLIPS

Cat. No.	Fits	Zinc-Plated Per 100	Lbs. Per Pkg.	Hot Dipped Galvanized Per 100	Lbs. Per Pkg.	Gauge	Std. Pkg.
(For Thin Wall Conduit)							
H-30	½"	$3.65	8.5	$4.15	8.9	1/8"x7/8"	100
H-45	¾"	4.05	10	4.60	10.5	1/8"x7/8"	100
H-55	1"	5.25	11.5	5.90	12	1/8"x7/8"	100
H-65	1¼"	7.45	17.5	8.45	18.4	1/8"x1"	100
H-75	1½"	9.50	10.5	10.75	11	1/8"x1"	50
H-85	2"	13.00	16	16.25	16.5	1/8"x1¼"	50
(For Rigid Conduit or Pipe)							
H-40	½"	3.85	9.3	4.35	9.8	1/8"x7/8"	100
H-50	¾"	4.25	11	4.90	11.5	1/8"x7/8"	100
H-60	1"	6.50	12.7	7.10	13.3	1/8"x7/8"	100
H-70	1¼"	8.75	18	9.75	18.9	1/8"x1"	100
H-80	1½"	11.50	15	15.25	17	3/16"x1"	50
H-90	2"	20.00	14	25.25	16	3/16"x1½"	25
H-92	2½"	26.00	17.5	32.00	19.5	3/16"x1½"	25
H-94	3"	31.00	8	38.50	8.8	3/16"x1½"	10
H-95	3½"	42.00	12	52.00	12.8	¼"x1½"	10
H-96	4"	46.50	13.5	60.00	14.5	¼"x1½"	10
H-97	5"	79.00	29	96.00	30	¼"x2"	10
H-98	6"	96.00	34	110.00	35	¼"x2"	10

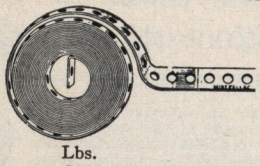
Minerallac Two Hole Pipe Straps



Minerallac two-hole straps are designed for use on loads too heavy to be supported by the one hole Jiffy Clip. New steels, selected for temper, and hardness and rugged design give them ample strength and rigidity to support pipes, conduits, cables, etc. Plated to give maximum protection against corrosion.

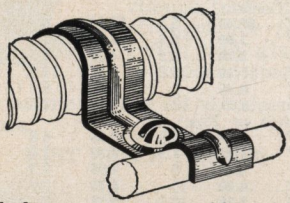
Cat. No.	Fits	STEEL Per 100	Lbs. Pkg.	EVERDUR Per 100	Lbs. Pkg.	Std. Pkg
(For Thin Wall Conduit)						
230	½″	$1.70	2.5	$6.30	3.25	100
245	¾″	2.30	3	9.10	3.9	100
255	1″	3.20	4	13.70	5.2	100
265	1¼″	4.80	11	18.75	13.2	100
275	1½″	6.25	12.5	22.25	15	100
285	2″	7.75	14	25.75	16.8	100
(For Rigid Conduit, Pipe or BX)						
225	BX	1.45	7.5	3.95	9.75	500
225	¼″	1.45	7.5	3.95	9.75	500
228	⅜″	1.60	2.5	6.20	3.25	100
240	½″	1.85	3	7.95	3.9	100
250	¾″	2.65	3.5	10.15	4.55	100
260	1″	3.90	4.2	17.00	5.46	100
270	1¼″	5.50	12	20.50	14.4	100
280	1½″	7.00	13	24.00	15.6	100
290	2″	8.50	15.5	27.50	18.6	100
292	2½″	9.50	22.5	29.25	27	100
294	3″	10.50	26	30.75	31.2	100

PERFORATED STRAPPING



Cat. No.	Width and Thickness	Per 100 Ft.	Lbs. per 100 Ft.	Packaged
405	¾″ x .035″	$2.40	8	5′ Straight Lengths, 20 per bundle
410	¾″ x .035″	2.40	8	10′ Straight Lengths, 10 per bundle
410C	¾″ x .035″	2.70	8	10′ Coils, 10 Coils per box
478C	⅞″ x .050″	3.60	12	10′ Coils

"Duplex" Jiffy Clips
Zinc Plated Steel or Everdur Alloy



Only one bolt or screw provides this ribbed clip with sufficient strength to support permanently any reasonable weight. Jiffy Clips are used for hanging pipe, conduit, and BX-Cable, for mounting coils and a great variety of other adaptations, air conditioning, and refrigeration, etc.

Cat. No.	Cable Or Tubing OD A	B	Steel Per 100 Std. Pkg.	Lbs. Pkg.	Everdur Per 100 Std. Pkg.	Lbs. Pkg.	Std. Pkg.
300A	.125″	.125″	$1.00	3.5	$3.00	4.55	500
300	.250″	.250″	1.15	5	3.45	6.5	500
301	.375″	.375″	1.50	6.5	4.40	8.45	500
302	.250″	.375″	1.60	6	4.80	7.8	500
303	.250″	.500″	1.75	6.5	5.25	8.45	500
303A	.415″	.415″	1.75	6.5	5.25	8.45	500
304	.375″	.625″	1.95	8	5.80	10.4	500
305	.500″	.500″	2.10	8.5	6.30	11.05	500
306	.625″	.625″	2.20	4.4	6.60	5.72	200

Special Sizes on Request

Minerallac Beam Clamp
Complete With Case-Hardened Screw



Permits easy mounting on steel beams without drilling and tapping.

Cat. No.	Fits Flange	Drop Rod	Per 100	Pounds Per Pkg.	Std. Pkg.
600	½″	¼″	$17.60	6.5	50
		(¼-20 Tappings on Bottom and Back)			
600-10	½″	10-24″	17.60	6.5	50
		(10-24 Tappings on Bottom and Back)			
602	¾″	⅜″	37.50	8.25	25
		(⅜″ Tapping on Bottom Only. No Tapping on Back)			
602-B	¾″	⅜″	41.25	8.25	25
		(⅜″ Tappings on Bottom and Back)			

Pin Bolts
Round Head



Cat. No.	Diam. Lgth. Inches	Per 100	Std. Pkg.	Lbs. 100
8406	¼″ x ¾″	$5.60	100	1.25
8408	¼″ x 1″	6.40	100	1.5
8410	¼″ x 1¼″	7.20	100	1.75
8412	¼″ x 1½″	8.00	50	2.25
8414	¼″ x 1¾″	10.40	50	2.5
8416	¼″ x 2″	11.20	50	2.75
8415	⅜″ x 1¼″	16.00	100	4.5

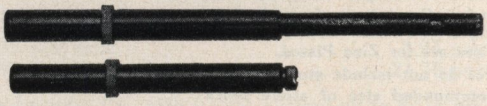
Minerallac Volt-Telling Statiscope
Pocket Type



The Minerallac Statiscope "lights up" and warns the worker when held in any alternating electrical field, and indicates the presence of voltage.

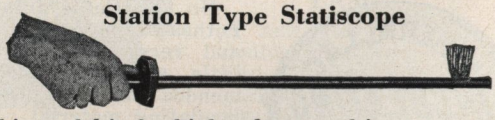
A sensitive instrument especially adapted to underground cable work, the pocket type Statiscope gives positive indication on 1000 volts and up when in direct contact with the conductor insulation, also at a point several times the flashover distance on non-insulated conductors. It is not necessary to touch conductors carrying high potential. Size 5⅜″ long, $\frac{9}{16}$″ diameter.

Overhead Extension Statiscope



Designed for overhead lines and has an extension, telescopic cover which lengthens the unit to 12 inches; when closed, size is reduced to 7⅛″; suitable for direct contact up to and including 2300 volts when held in operator's hand. Diameter ¾″.

Station Type Statiscope



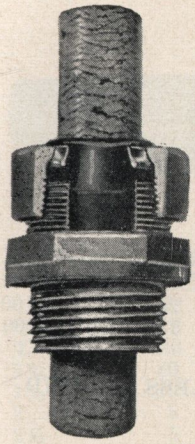
This model is for high voltage and is recommended for use in Stations, Sub-Stations and other high voltage equipment. Designed to give positive indication on 2000 volts and up, breakdown is well over 75,000 volts. Direct contact with conductor is not necessary, since the Statiscope will indicate at a point well over the flashover distance. Sensitivity is independent of external capacities, and thus may be attached to an extension handle to reach distant conductors. Made from hard rubber rod; 24 inches long with 12 inches of solid rubber between the handle guard and the internal metal parts. No metal exposed. Diameter ⅝″.

Periscope Attachment

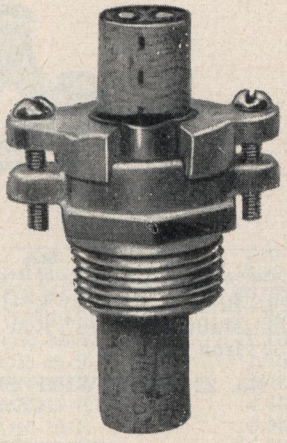
For daylight use in brightly lighted places where glow tube would be indistinct. Available at additional cost.

THE M & W ELECTRIC MANUFACTURING CO., Inc.

WATERTIGHT CONNECTORS FOR SERVICE ENTRANCE CABLE



HN Type



2 Scr. Type

The cut away view of the connector above shows the conical type compression cap fitting down over the Neoprene bushing which assures ease in take-up over a wider range of cable size variations than previously possible.

By selecting the proper size cable opening, it is possible to slip the cable through the bushing opening and then tighten. Nothing to take apart or reassemble means time saved.

These two connectors represent simplicity, efficiency and economy when installing Service entrance cables.

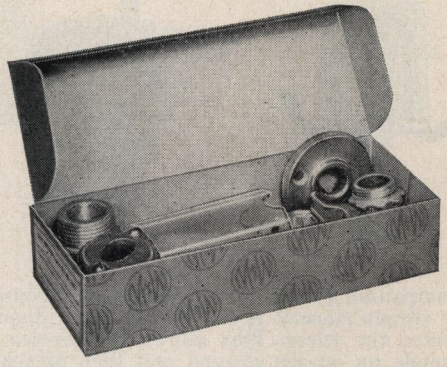
TWO SCREW OR HEX NUT—ROUND

Cat. No. Hex Nut	Cat. No. 2 Scr.	Size Cable Opening	Fits Cable Underwriters Type Cable	Cable Size Ins. Cond.	Cable Size Bare Neut.	Ctn. Qty.	Std. Pkg.
HN-4	168	15/32	SE Style A	1-8	1-10	10	100
			SE Style U	1-8	1-10		
			and S D	1-8	1-8		
HN-6	166	17/32	SE Style A	1-6	1-8		
			SE Style U	1-6	1-8	10	100
			and S D	1-6	1-6		

TWO SCREW OR HEX NUT—OVAL

Hex Nut	2 Scr.						
HN-0	310	13/32x9/16	SE Style A	2-10	1-12		
			SE Style U	2-10	1-10	10	100
			and S D	2-10	1-12		
				2-10	1-10		
HN-1	368	15/32x23/32	SE Style A	2-8	1-10	10	100
			SE Style U	2-8	1-8		
			and S D	2-8	1-10		
				2-8	1-8		
HN-2	366	9/16x13/16	SE Style A	2-6	1-8		
			SE Style U	2-6	1-6	10	100
			and S D	2-6	1-8		
				2-6	1-6		
HN-3	364	5/8x29/32	SE Style A	2-4	1-6		
			SE Style U	2-4	1-4	10	100
			and S D	2-4	1-6		
				2-4	1-4		
HN-23	032R	23/32x1-3/32	SE Style A	2-2	1-4	5	50
			SE Style U	2-2	1-2		
			and S D				

SERVICE ENTRANCE KITS



M & W Service entrance kits contain all necessary parts at a price which is less than buying individual parts in a convenient ready-to-use package.

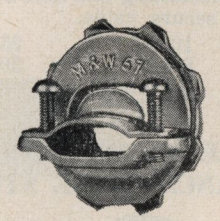
The kit contains an Entrance Head, Two Watertight Connectors, One-Non-Watertight Connector, twelve One-Hole Wall Strap, Wall Flange with compound and necessary cadmium plated wood screws. Kits can be furnished with No. 25 Cap or with 253 cap.

TWO-SCREW CONNECTOR — NEOPRENE BUSHING

Cat. No.	Cable Size Including Neutral	Hub Size	Wt. Lbs. per 100	Std. Pkg.
0380	8-3	1″	135	25
0360	6-3	1″	135	25
0340	4-3	1″	135	25
1680	8-2	1″	135	25
1660	6-2	1″	135	25
0230	2-3	1¼″	200	10

NON-WATER-TIGHT CONNECTORS

For Oval or Round Service Entrance Cable

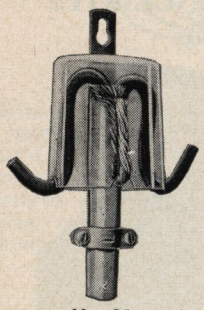


No. 65, 66, 67

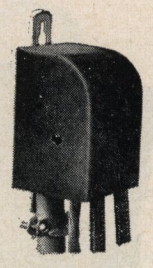
Cat. No.	K.O. or Threaded Fitting	Cable Size	Ctn. Qty.	Std. Pkg.
65	¾″	2-C—6-4-2 3-C—8-6	25	250
66 66R	1″	3-c-6-4-2 oval 3-c-6-4-2 rd.	20	200
67 67R	1¼″	3-c-6-4-2 oval 3-c-6-4-2 rd.	10	100

THE M & W ELECTRIC MANUFACTURING CO., Inc.

SERVICE CAP WITH CABLE HANGER ATTACHED



No. 25



No. 24

This companion fitting for the watertight connector is very simple since it is not necessary to dismantle it to enter the wires. This allows the service cable to be made up on the ground and then attached to the building.

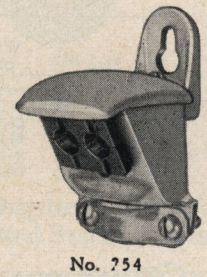
Catalog No.	Cable Size Including Neutral	Wt. Lbs. Per 100	Ctn. Qty.	Std. Pkg.
25 Polystyrene	8-6-4	32	25	100

CAP FOR 3 NO. 2 CABLE

Similar to the No. 25 cap above except the size permits the easy use of 3 No. 2 and larger cable.

24	3-2	42	25	100

ENTRANCE HEAD WITH ONE-HOLE MOUNTING

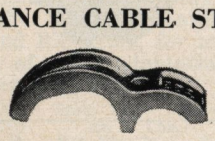


No. 254

Aluminum casting—Bakelite Insulators—Slotted top cover lifts off by loosening one Screw mounting. Two Screw clamp to secure cable.

253	10-8-6	25	5	50
254	8-6-4	30	5	50
255	2 and 3 wire 2-3	35	5	50

ONE-HOLE ALUMINUM SERVICE ENTRANCE CABLE STRAPS



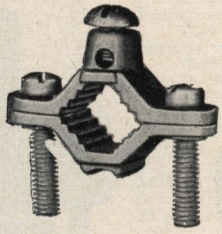
Cable size—Oval

0-275	For 8-3 and 6-3	13	100	1000
0-276	For 8-3, 6-3, 4-3	20	100	1000
281	For 8-3, 6-3, 4-3	21	100	1000
232	For 2-3	50	50	500
282	For 3-2/0	60	50	500
284	For 3-4/0	64	50	500
	Cable size—Round			
0-239	For 8-2 or 6-2	13	100	1000

GROUND CLAMPS

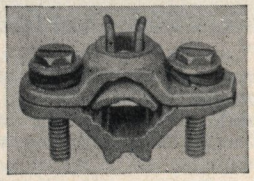
The top halves of all units are slotted bolt type, eliminating the need of removing Screws.

No. 20 BARE WIRE SOLDERLESS GROUND CLAMP



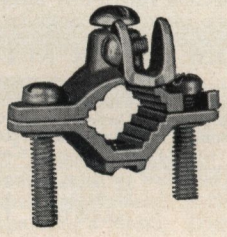
Catalog No.	Size Pipe or Rod	Wt. Lbs. Per 100	Ctn. Qty.	Std. Pkg.
20—Bronze	½"-¾"-1"	25	10	100
20—Malleable Iron	½" Rod	24	10	100

No. 22 BARE WIRE SOLDERLESS GROUND CLAMP



22—Bronze	½"-¾"-1"	26	10	100
22—Malleable Iron	½" Rod	24	10	100

No. 30 ARMORED WIRE GROUND CLAMP



30—Bronze	½"-¾"-1"	28	10	100
30—Malleable Iron	½" Rod	25	10	100

THREADLESS SERVICE MAST FITTINGS KITS FOR 2 INCH CONDUIT OR PIPE

2" MAST KITS

CAT. No. SM-200-S—Consists of 263, 2000, 3—PS-7 with lag screws and 2200. Weight 3 lbs.

CAT. No. SM-200-SF—Same as SM-200-S but includes roof flashing and seal. Weight 6 lbs.

CAT. No. SM-200-SFI $7.00 each—Same as SM-200-SF but with three 2300-I insulators. Weight 8 lbs.

CAT. No. SM-200-B—Consists of 263, 2000, 2-2300 and 2200. Weight 5 lbs.

CAT. No. SM-200-BF $5.35 each—Same as SM-200-B but includes roof flashing and seal. Weight 7 lbs.

CAT. No. SM-200 BFI—Same as SM-200-BF but includes 3-2300-I insulators. Weight 10 lbs.

PYLE-NATIONAL OR-SERIES PYLETS

With Oval Cover Opening—Taper Threaded

Rustproofed Ferrous Alloy
With Chromate Sealed Cadmium Plate Finish

Pylets have a large flat back area which can be drilled for mounting screws.



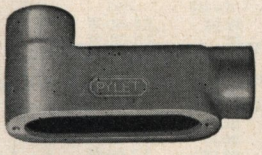
TYPE E

Size Inches	Std. Pkg.	Cat. No.	List Each
½	50	OR-15-E	$0.70
¾	30	OR-25-E	.80
1	20	OR-35-E	1.10
1¼	20	OR-45-E	1.70
1½	10	OR-55-E	2.40
2	5	OR-65-E	4.40
2½	5	OR-75-E	9.00
3	5	OR-85-E	11.00
3½	5	OR-95-E	16.00
4	5	OR-105-E	19.00

TYPE C



Size Inches	Std. Pkg.	Cat. No.	List Each
½	50	OR-15-C	$0.80
¾	30	OR-25-C	.95
1	20	OR-35-C	1.45
1¼	20	OR-45-C	2.30
1½	10	OR-55-C	3.00
2	5	OR-65-C	5.00
2½	5	OR-75-C	10.50
3	5	OR-85-C	14.00
3½	5	OR-95-C	23.00
4	5	OR-105-C	26.00



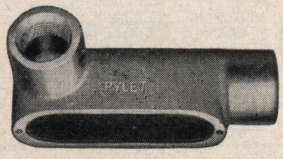
TYPE LB

Size Inches	Std. Pkg.	Cat. No.	List Each
½	50	OR-15-LB	$0.80
¾	30	OR-25-LB	.95
1	20	OR-35-LB	1.45
1¼	20	OR-45-LB	2.30
1½	10	OR-55-LB	3.00
2	5	OR-65-LB	5.00
2½	5	OR-75-LB	10.50
3	5	OR-85-LB	14.00
3½	5	OR-95-LB	23.00
4	5	OR-105-LB	26.00

PYLE-NATIONAL OR-SERIES PYLETS

With Oval Cover Opening—Taper Threaded

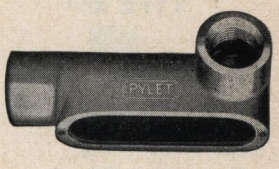
Rustproofed Ferrous Alloy
With Chromate Sealed Cadmium Plate Finish



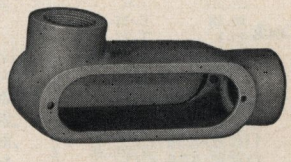
TYPE LL

Size Inches	Std. Pkg.	Cat. No.	List Each
½	50	OR-15-LL	$0.80
¾	30	OR-25-LL	.95
1	20	OR-35-LL	1.45
1¼	20	OR-45-LL	2.30
1½	10	OR-55-LL	3.00
2	5	OR-65-LL	5.00
2½	5	OR-75-LL	10.50
3	5	OR-85-LL	14.00
3½	5	OR-95-LL	23.00
4	5	OR-105-LL	26.00

TYPE LR



Size Inches	Std. Pkg.	Cat. No.	List Each
½	50	OR-15-LR	$0.80
¾	30	OR-25-LR	.95
1	20	OR-35-LR	1.45
1¼	20	OR-45-LR	2.30
1½	10	OR-55-LR	3.00
2	5	OR-65-LR	5.00
2½	5	OR-75-LR	10.50
3	5	OR-85-LR	14.00
3½	5	OR-95-LR	23.00
4	5	OR-105-LR	26.00



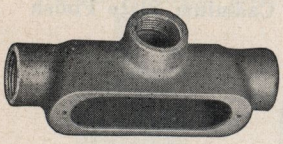
TYPE LRL

Size Inches	Std. Pkg.	Cat. No.	List Each
½	50	OR-15-LRL	$0.90
¾	30	OR-25-LRL	1.10
1	20	OR-35-LRL	1.50
1¼	20	OR-45-LRL	3.20
1½	10	OR-55-LRL	4.40
2	5	OR-65-LRL	6.30
2½	5	OR-75-LRL	12.00
3	5	OR-85-LRL	15.00
3½	5	OR-95-LRL	25.00
4	5	OR-105-LRL	28.00

DISCOUNTS: SCHEDULE "JF"

PYLE-NATIONAL OR-SERIES PYLETS

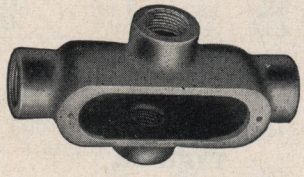
With Oval Cover Opening—Taper Threaded
Rustproofed Ferrous Alloy
With Chromate Sealed Cadmium Plate Finish



TYPE T

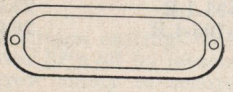
Size Inches			Std. Pkg.	Cat. No.	List Each
½	½	½	50	OR-15-T	$1.00
¾	¾	¾	30	OR-25-T	1.20
1	1	1	20	OR-35-T	1.80
1¼	1¼	1¼	20	OR-45-T	2.70
1½	1½	1½	10	OR-55-T	3.60
2	2	2	5	OR-65-T	5.60
2½	2½	2½	5	OR-75-T	11.00
3	3	3	5	OR-85-T	16.00
3½	3½	3½	5	OR-95-T	25.00
4	4	4	5	OR-105-T	28.00

TYPE X



Size Inches	Std. Pkg.	Cat. No.	List Each
½	50	OR-15-X	$1.30
¾	30	OR-25-X	1.60
1	20	OR-35-X	2.20
1¼	20	OR-45-X	3.10
1½	10	OR-55-X	4.00
2	5	OR-65-X	7.00
2½	5	OR-75-X	13.00
3	5	OR-85-X	20.00
3½	5	OR-95-X	29.00
4	5	OR-105-X	35.00

GASKETS FOR OR-SERIES PYLETS



CUTOUT

Cork

Size Inches	Std. Pkg.	Cat. No.	List Each
½	200	ORK-150-CC	$0.20
¾	100	ORK-250-CC	.20
1	50	ORK-350-CC	.30
1¼ or 1½	25	ORK-550-CC	.40
2	25	ORK-650-CC	.50
2½ or 3	25	ORK-850-CC	.80
3½ or 4	25	ORK-1050-CC	1.00

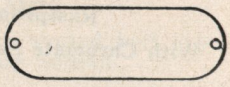
Vellum

½	200	ORK-150-C	.20
¾	100	ORK-250-C	.20
1	50	ORK-350-C	.30
1¼ or 1½	25	ORK-550-C	.40
2	25	ORK-650-C	.50
2½ or 3	25	ORK-850-C	.80
3½ or 4	25	ORK-1050-C	1.00

PYLE-NATIONAL OR-SERIES PYLETS

GASKETS FOR OR-SERIES PYLETS

SOLID
Neoprene



Size Inches	Std. Pkg.	No. Cat.	Each List
½	200	ORK-150-SR	$0.20
¾	100	ORK-250-SR	.20
1	50	ORK-350-SR	.30
1¼ or 1½	25	ORK-550-SR	.40
2	25	ORK-650-SR	.50
2½ or 3	25	ORK-850-SR	.80
3½ or 4	25	ORK-1050-SR	1.00

COVERS FOR OR-SERIES PYLETS

Rustproofed



Pressed Steel

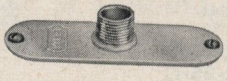
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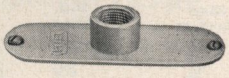
Ferrous Alloy

Size Inches	Std. Pkg.	Pressed Steel Cat. No.	Pressed Steel List Each	Cast Ferrous Alloy Cat. No.	Cast Ferrous Alloy List Each
½	200	ORK-150	$0.15	ORK-150-F	$0.35
¾	100	ORK-250	.20	ORK-250-F	.45
1	50	ORK-350	.35	ORK-350-F	.70
1¼ or 1½	10	ORK-550	.50	ORK-550-F	1.00
2	5	ORK-650	.85	ORK-650-F	1.40
2½ or 3	5	ORK-850	1.30	ORK-850-F	1.70
3½ or 4	5	ORK-1050	1.60	ORK-1050-F	2.50

Sheet Steel with Nipple



Male



Female

Cat. No.	Size, In. Nipple	Size, In. Cover	List Each	Std. Pkg.	Cat. No.	Size, In. Nipple	Size, In. Cover	List Each
ORKM-153	⅜	½	$0.50	200	ORKF-153	⅜	½	$0.50
ORKM-253	⅜	¾	.60	100	ORKF-253	⅜	¾	.60
ORKM-353	⅜	1	.80	50	ORKF-353	⅜	1	.80
ORKM-154	½	½	.60	200	ORKF-154	½	½	.60
ORKM-254	½	¾	.70	100	ORKF-254	½	¾	.70
ORKM-354	½	1	.90	50	ORKF-354	½	1	.90



Weatherproof—Sheet Steel with Rubber Bushing Cord Grip and Gasket

Cat. No.	Diam. Cord	Size Cover	Std. Pkg.	List Each
ORKD-152	.125 to .250	½	200	$1.10
ORKD-153	.250 to .375	½	200	1.10
ORKD-154	.375 to .500	½	200	1.10
ORKD-155	.500 to .625	½	200	1.10
ORKD-252	.125 to .250	¾	100	1.20
ORKD-253	.250 to .375	¾	100	1.20
ORKD-254	.375 to .500	¾	100	1.20
ORKD-255	.500 to .625	¾	100	1.20
ORKD-353	.312 to .375	1	50	1.50
ORKD-354	.375 to .500	1	50	1.50
ORKD-355	.500 to .625	1	50	1.50
ORKD-356	.625 to .750	1	50	1.70

DISCOUNTS: SCHEDULE "JF"

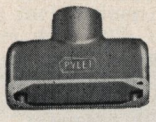
PYLE - NATIONAL RECTANGULAR PYLETS

Type "A"

FOR THREADED THICK WALL CONDUIT

Size In.	Std. Pkg.	Cat. No.	Price Each
½	50	R-15-A	$0.70
¾	30	R-25-A	.80
1	20	R-35-A	1.10
1¼	20	R-45-A	1.80
1½	10	R-55-A	2.50
2	5	R-65-A	4.50
2½	5	R-75-A	9.00
3	5	R-85-A	11.00
3½	5	R-95-A	16.00
4	5	R-105-A	20.00

Type "A"

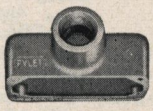


Type "B"

FOR THREADED THICK WALL CONDUIT

Size In.	Std. Pkg.	Cat. No.	Price Each
½	50	R-15-B	$0.70
¾	30	R-25-B	.80
1	20	R-35-B	1.10
1¼	20	R-45-B	1.80
1½	10	R-55-B	2.50
2	5	R-65-B	4.50
2½	5	R-75-B	9.00
3	5	R-85-B	11.00

Type "B"



Type "C"

FOR THREADED THICK WALL CONDUIT

Size In.	Std. Pkg.	Cat. No.	Price Each
½	50	R-15-C	$0.80
¾	30	R-25-C	.95
1	20	R-35-C	1.45
1¼	20	R-45-C	2.30
1½	10	R-55-C	3.00
2	5	R-65-C	5.00
2½	5	R-75-C	10.50
3	5	R-85-C	14.00
3½	5	R-95-C	23.00
4	5	R-105-C	26.00

Type "C"



Type "E"

FOR THREADED THICK WALL CONDUIT

Size In.	Std. Pkg.	Cat. No.	Price Each
½	50	R-15-E	$0.70
¾	30	R-25-E	.80
1	20	R-35-E	1.10
1¼	20	R-45-E	1.70
1½	10	R-55-E	2.40
2	5	R-65-E	4.40
2½	5	R-75-E	9.00
3	5	R-85-E	11.00
3½	5	R-95-E	16.00
4	5	R-105-E	19.00

Type "E"



Type "LL"

FOR THREADED THICK WALL CONDUIT

Size In.	Std. Pkg.	Cat. No.	Price Each
½	50	R-15-LL	$0.80
¾	30	R-25-LL	.95
1	20	R-35-LL	1.45
1¼	20	R-45-LL	2.30
1½	10	R-55-LL	3.00
2	5	R-65-LL	5.00
2½	5	R-75-LL	10.50
3	5	R-85-LL	14.00
3½	5	R-95-LL	23.00
4	5	R-105-LL	26.00

Type "LL"

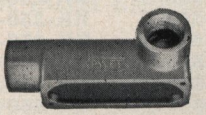


Type "LR"

FOR THREADED THICK WALL CONDUIT

Size In.	Std. Pkg.	Cat. No.	Price Each
½	50	R-15-LR	$0.80
¾	30	R-25-LR	.95
1	20	R-35-LR	1.45
1¼	20	R-45-LR	2.30
1½	10	R-55-LR	3.00
2	5	R-65-LR	5.00
2½	5	R-75-LR	10.50
3	5	R-85-LR	14.00
3½	5	R-95-LR	23.00
4	5	R-105-LR	26.00

Type "LR"



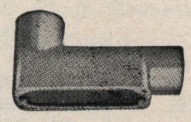
RECTANGULAR PYLETS PYLE - NATIONAL

Type "LB"

FOR THREADED THICK WALL CONDUIT

Size In.	Std. Pkg.	Cat. No.	Price Each
½	50	R-15-LB	$0.80
¾	30	R-25-LB	.95
1	20	R-35-LB	1.45
1¼	20	R-45-LB	2.30
1½	10	R-55-LB	3.00
2	5	R-65-LB	5.00
2½	5	R-75-LB	10.50
3	5	R-85-LB	14.00
3½	5	R-95-LB	23.00
4	5	R-105-LB	26.00

Type "LB"

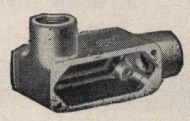


Type "LRL"

FOR THREADED THICK WALL CONDUIT

Size In.	Std. Pkg.	Cat. No.	Price Each
½	50	R-15-LRL	$0.90
¾	30	R-25-LRL	1.10
1	20	R-35-LRL	1.50
1¼	20	R-45-LRL	3.20
1½	10	R-55-LRL	4.40
2	5	R-65-LRL	6.30
2½	5	R-75-LRL	12.00
3	5	R-85-LRL	15.00

Type "LRL"

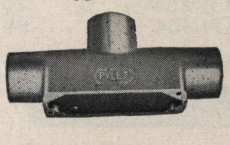


Type "TB"

FOR THREADED THICK WALL CONDUIT

Size In.	Std. Pkg.	Cat. No.	Price Each
½	50	R-15-TB	$1.10
¾	30	R-25-TB	1.30
1	20	R-35-TB	1.90
1¼	10	R-45-TB	2.90
1½	10	R-55-TB	3.80
2	5	R-65-TB	6.00
2½	5	R-75-TB	12.00
3	5	R-85-TB	17.00
3½	5	R-95-TB	27.00
4	5	R-105-TB	29.00

Type "TB"

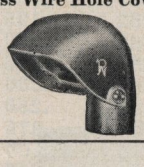


Type "F"

FOR THREADED THICK WALL CONDUIT

Size In.	Std. Pkg.	Cat. No.	Price Each
½	50	R-15-F	$1.40
¾	30	R-25-F	2.00
1	20	R-35-F	2.90
1¼	20	R-45-F	5.60
1½	10	R-55-F	7.00
2	5	R-65-F	10.00

Type "F"
Less Wire Hole Cover

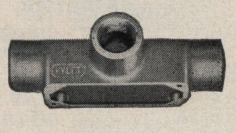


Type "T"

FOR THREADED THICK WALL CONDUIT

Size In.	Std. Pkg.	Cat. No.	Price Each
½	50	R-15-T	$1.00
¾	50	R-25-T	1.20
1	20	R-35-T	1.80
1¼	10	R-45-T	2.70
1½	10	R-55-T	3.60
2	5	R-65-T	5.60
2½	5	R-75-T	11.00
3	5	R-85-T	16.00
3½	5	R-95-T	25.00
4	5	R-105-T	28.00

Type "T"

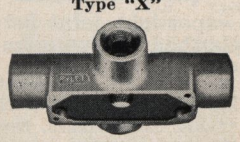


Type "X"

FOR THREADED THICK WALL CONDUIT

Size In.	Std. Pkg.	Cat. No.	Price Each
½	50	R-15-X	$1.30
¾	30	R-25-X	1.60
1	20	R-35-X	2.20
1¼	10	R-45-X	3.10
1½	10	R-55-X	4.00
2	5	R-65-X	7.00
2½	5	R-75-X	13.00
3	5	R-85-X	20.00

Type "X"



DISCOUNTS: SCHEDULE "JF"

PYLE-NATIONAL RECTANGULAR PYLETS

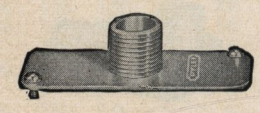
RECTANGULAR PYLET COVERS

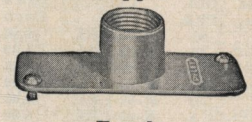


Blank Covers Rustproofed

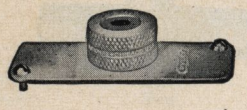
Size Inches	Std. Pkg.	Pressed Steel Cat. No.	Pressed Steel List Each	Cast Ferrous Alloy Cat. No.	Cast Ferrous Alloy List Each
½	200	RK-150	$0.15	RK-150-F	$0.35
¾	100	RK-250	.20	RK-250-F	.45
1	50	RK-350	.35	RK-350-F	.70
1¼	25	RK-450	.50	RK-450-F	1.00
1½	10	RK-550	.50	RK-550-F	1.00
2	5	RK-650	.85	RK-650-F	1.40
2½ or 3	5	RK-850	1.30	RK-850-F	1.70
3½ or 4	5	RK-1050	1.60	RK-1050-F	2.50

Pressed Steel with Brass Nipple





Male Cat. No.	Size, In. Nipple	Size, In. Cover	List Each	Std. Pkg.	Female Cat. No.	Size, In. Nipple	Size, In. Cover	List Each
RKM-153	⅜	½	$0.50	200	RKF-153	⅜	½	$0.50
RKM-253	⅜	¾	.60	100	RKF-253	⅜	¾	.60
RKM-353	⅜	1	.80	50	RKF-353	⅜	1	.80
RKM-154	½	½	.60	200	RKF-154	½	½	.60
RKM-254	½	¾	.70	100	RKF-254	½	¾	.70
RKM-354	½	1	.90	50	RKF-354	½	1	.90



Weatherproof—Pressed Steel with Rubber Bushing Cord Grip and Gasket

Cat. No.	Diam. Cord	Size Cover	Std. Pkg.	List Each
RKD-152	.125 to .250	½	200	$1.10
RKD-153	.250 to .375	½	200	1.10
RKD-154	.375 to .500	½	200	1.10
RKD-155	.500 to .625	½	200	1.10
RKD-252	.125 to .250	¾	100	1.20
RKD-253	.250 to .375	¾	100	1.20
RKD-254	.375 to .500	¾	100	1.20
RKD-255	.500 to .625	¾	100	1.20
RKD-353	.250 to .375	1	50	1.50
RKD-354	.375 to .500	1	50	1.50
RKD-355	.500 to .625	1	50	1.50
RKD-356	.625 to .750	1	50	1.70

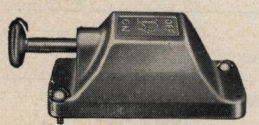
MIDGET WIRING DEVICE COVERS*

Aluminum Complete with Mounting Bridge—Single Device



Cat. No.	Size Inches	Std. Pkg.	List Each
RKS-151	½	50	$0.60
RKS-251	¾	25	.80
RKS-351	1	25	1.00

VAPORTIGHT MIDGET SWITCH COVERS*



The installation of switches requires the use of a mounting bridge which is furnished with each cover. A gasket is also furnished to provide a vaportight joint between the cover flange and Pylet body. Aluminum alloy.

Cat. No.	Description	Size Inch	Std. Pkg.	List Each
RKSV-151	One Switch	½	50	$2.80

***Takes P&S-Despard, Bryant, Hubbell, Arrow H&H and General Electric—Interchangeable Single-Pole, Double-Pole, 3-Way and 4-Way Switches**

PYLE-NATIONAL RECTANGULAR PYLETS

COMPOSITION ATTACHMENT PLUG RECEPTACLES

15 Amp., 125 Volts or 10 Amp., 250 Volts



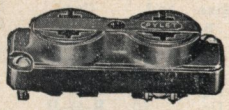
2-Pole, Double T Slots

Cat. No.	Size In.	Std. Pkg.	List Each
RKRC-151	½	100	$1.20
RKRC-251	¾	100	1.40
RKRC-351†	1	50	1.80

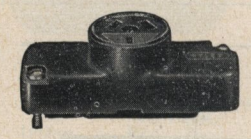
2 Pole Polarity, Single T Slot

RKRC-1511	½	100	1.20
RKRC-3511	1	50	1.80

2-Pole, Duplex, Double T Slots



Cat. No.	Size In.	Std. Pkg.	List Each
RKRC-152	½	100	$1.80
RKRC-252	¾	50	2.00
RKRC-352†	1	50	2.50



3-Wire, 3-Pole

Cat. No.	Size In.	Std. Pkg.	List Each
RKRC-153	½	100	$1.50
RKRC-253	¾	100	1.60
RKRC-353†	1	50	1.90

2-Wire, 3-Pole

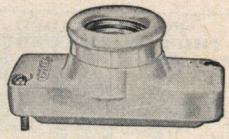
RKRC-153G	½	100	1.70
RKRC-253G	¾	100	1.80
RKRC-353G†	1	50	2.00

Ground clip furnished on 2-wire, 3-pole units only.

PORCELAIN LAMP RECEPTACLES

660 Watts, 600 Volts

With Shade Holder Groove



Cat. No.	Size In.	Std. Pkg.	List Each
RKL-150	½	100	$1.00
RKL-250	¾	100	1.10
RKL-350†	1	50	1.60

PORCELAIN ATTACHMENT PLUG RECEPTACLES

15 Amp., 125 Volts or 10 Amp., 250 Volts

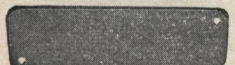


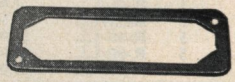
2 Pole with Double T Slots

Cat. No.	Size In.	Std. Pkg.	List Each
RKR-151	½	100	$1.35
RKR-251	¾	100	1.55
RKR-351†	1	50	2.00

†Has sheet steel mounting flange.

RECTANGULAR PYLET GASKETS—VELLUM‡





Solid (S) Cat. No. Solid	Solid (S) Cat. No. Cutout	Cutout (C) Size Inches	Std. Pkg.	List Each
RK-150-S	RK-150-C	½	200	$0.20
RK-250-S	RK-250-C	¾	100	.20
RK-350-S	RK-350-C	1	50	.30
RK-450-S	RK-450-C	1¼	25	.40
RK-550-S	RK-550-C	1½	25	.40
RK-650-S	RK-650-C	2	25	.50
RK-850-S	RK-850-C	2½ or 3	25	.80
RK-1050-S	RK-1050-C	3½ or 4	25	1.00

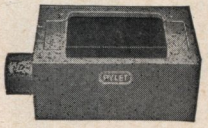
‡Has sheet metal mounting flange.

PYLE-NATIONAL PYLETS

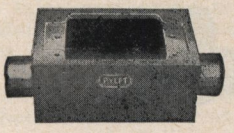
FS AND FD SERIES — SINGLE

Threaded—Rustproofed Ferrous Alloy

FS and FD Series Pylets have square corners and will take all standard switch and receptacle plates. Dimensions, exclusive of hubs: Shallow Type 4 9/16 inches long, 2 13/16 inches wide, 2 1/16 inches deep; Deep Type 4 9/16 inches long, 2 13/16 inches wide, 2¾ inches deep. For covers and gaskets, see separate listing.



FS and FD

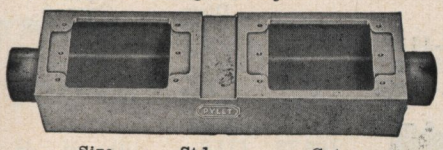


FSC and FDC

Type	Size In.	Std. Pkg.	Cat. No.	List Each
		Shallow Type—Blank		
FS	----	25	F-100-FS	$1.00
		Deep Type—Blank		
FD	----	25	F-100-FD	1.20
		Shallow Type with Mounting Feet		
FS	¾	25	F-24-FS	2.50
		Shallow Type		
	½	25	F-10-FS	$1.45
FS	¾	25	F-20-FS	1.55
	1	25	F-30-FS	1.70
		Deep Type		
	½	25	F-10-FD	1.75
FD	¾	25	F-20-FD	1.85
	1	25	F-30-FD	2.00
		Shallow Type		
	½	25	F-10-FSC	$1.65
FSC	¾	25	F-20-FSC	1.80
	1	25	F-30-FSC	2.20
		Deep Type		
	½	25	F-10-FDC	1.95
FDC	¾	25	F-20-FDC	2.10
	1	25	F-30-FDC	2.50

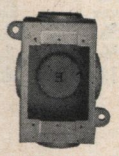
FS SERIES — TWO GANG TANDEM TYPE

Dimensions, exclusive of hubs: Shallow Type only; 10⅛ inches long, 2 13/16 inches wide, 2 1/16 inches deep. Covers listed separately.

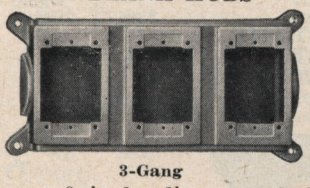


Type	Size In.	Std. Pkg.	Cat. No.	List Each
	½	25	F-172-FSC	$3.50
FSC	¾	25	F-272-FSC	3.70
	1	10	F-372-FSC	3.90

FD SERIES WITH BLANK HUBS



Single



3-Gang

Mounting feet have 9/32-inch diameter holes. Blank hubs can be drilled and tapped for conduit. Maximum conduit size ½-inch, except for F-100F which is 1-inch.

	Type		Std. Pkg.	Cat. No.	List Each
F	Single	Shallow*	25	F-100-F	$2.20
FD	2-Gang	Deep	15	F-2-FD	4.40
FD	3-Gang	Deep	5	F-3-FD	6.60
FD	4-Gang	Deep	5	F-4-FD	8.80

*½-inch deeper than shallow series.

PYLE-NATIONAL PYLETS

COVERS FOR FS AND FD PYLETS

Rustproofed Ferrous Alloy

Single and Two-Gang Tandem

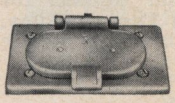


XCA-101

For Round Flush Receptacles

With spring door.

Cat. No.	Std. Pkg.	List Each
XCA-101	25	$2.50



XCA-1012

For Duplex Receptacles

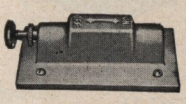
With spring door.

Cat. No.	Std. Pkg.	List Each
XCA-1012	25	3.00

For Tumbler Switches with Square Handle

Vaportight Single knob.

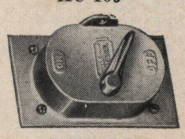
Cat. No.	Description	Std. Pkg.	List Each
XC-100	With Gasket	25	$3.50



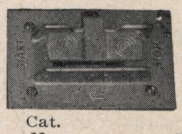
XC-100

Vaportight — With Front Handle.

Cat. No.	Description	Std. Pkg.	List Each
XCY-101	With Gasket	25	3.50



XCY-101



Type XBP Cover with Push Button Unit Only

Cat. No.	Normal Position	Plate Marking	List Each
XBP-101	1 Circuit	Start	$9.60*
XBP-102	1 Circuit	Stop	9.60*
XBP-103	2 Circuit	Start-Stop	11.80*
XBP-104	2 Circuit	Start-Start	11.80*
XBP-105	2 Circuit	Stop-Stop	11.80*
XBP-116	1 Circuit—Univ.	Start or Stop	16.50*
XBP-117	2 Circuit—Univ.	Start-Stop, Start-Start, Stop-Stop	19.50*

For Tumbler Switches with Square Handle

Vaportight.

Cat. No.	Description	Std. Pkg.	List Each
XCP-1011	With Gasket	25	$3.50



For Round Flush Receptacles

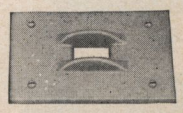
Cat. No.	Description	Std. Pkg.	List Each
XCA-101-TA	Plain	25	$1.00



For Indicator Light

Cat. No.	Jewel	Std. Pkg.	List Each
XC-300	Clear	25	$3.00
XC-300-R	Ruby	25	3.50





For Tumbler Switches with Square Handle

With guards for handle. Ferrous Alloy.

Cat. No.	Description	Std. Pkg.	List Each
XCT-101	No Gasket	25	$0.70

Blank Covers

Cat. No.	Description	Std. Pkg.	List Each
XC-200	With Gasket	25	$0.50



DISCOUNTS: SCHEDULE "JF"
* Except XBP covers—SCHEDULE "AD"

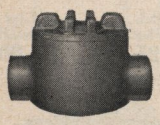
PYLE-NATIONAL PYLETS

VT SERIES JUNCTION PYLETS

Explosion-Proof, Dust-Tight and Weather-Resistant

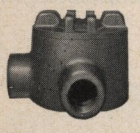
Class I, Groups C and D; Class II, Groups E, F and G; and Class III

Used for general wiring purposes in hazardous locations. Pylet bodies have internal threads for screw covers. Material: Rustproofed Ferrous Alloy.



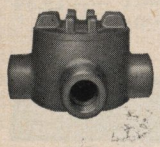
Type VTC

Cat. No.	Size	Outside Diam. Cover	Depth Over Cover	List Each
VTC-11	½	2 9/16	2 3/8	$3.10
VTC-22	¾	2 9/16	2 3/8	3.30
VTC-1103	½	3 7/16	2 15/16	3.80
VTC-2203	¾	3 7/16	2 15/16	4.00
VTC-3303	1	3 7/16	2 15/16	4.20
VTC-4404	1¼	4	3 5/16	6.80



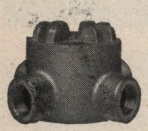
Type VTLR

Cat. No.	Size	Outside Diam. Cover	Depth Over Cover	List Each
VTLR-11	½	2 9/16	2 3/8	$3.10
VTLR-22	¾	2 9/16	2 3/8	3.30
VTLR-1103	½	3 7/16	2 15/16	3.80
VTLR-2203	¾	3 7/16	2 15/16	4.00
VTLR-3303	1	3 7/16	2 15/16	4.20
VTLR-4404	1¼	4	3 5/16	6.80



Type VTT

Cat. No.	Size	Outside Diam. Cover	Depth Over Cover	List Each
VTT-111	½	2 9/16	2 3/8	$3.30
VTT-222	¾	2 9/16	2 3/8	3.60
VTT-11103	½	3 7/16	2 15/16	4.00
VTT-22203	¾	3 7/16	2 15/16	4.30
VTT-33303	1	3 7/16	2 15/16	4.50
VTT-33304	1	4	3 5/16	7.00
VTT-44404	1¼	4	3 5/16	7.30



Type VTX

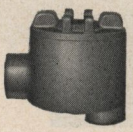
Cat. No.	Size	Outside Diam. Cover	Depth Over Cover	List Each
VTX-1111	½	2 9/16	2 3/8	$3.50
VTX-2222	¾	2 9/16	2 3/8	3.90
VTX-333303	1	3 7/16	2 15/16	4.90
VTX-444404	1¼	4	3 5/16	7.80

PYLE-NATIONAL PYLETS

VT SERIES JUNCTION PYLETS

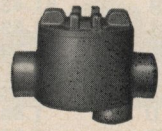
Explosion-Proof, Dust-Tight and Weather-Resistant

Class I, Groups C and D; Class II, Groups E, F and G; and Class III



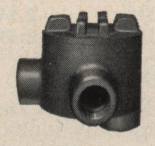
Type VTB

Cat. No.	Size	Outside Diam. Cover	Depth Over Cover	List Each
VTB-11	½	2 9/16	2 3/8	$3.10
VTB-22	¾	2 9/16	2 3/8	3.30
VTB-1103	½	3 7/16	2 15/16	3.80
VTB-2203	¾	3 7/16	2 15/16	4.00
VTB-3303	1	3 7/16	2 15/16	4.20
VTB-4404	1¼	4	3 5/16	6.80



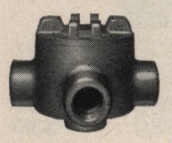
Type VTBC

Cat. No.	Size	Outside Diam. Cover	Depth Over Cover	List Each
VTBC-111*	½	2 9/16	2 3/8	$3.30
VTBC-222	¾	2 9/16	2 3/8	3.60
VTBC-33303	1	3 7/16	2 15/16	4.50



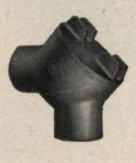
Type VTBLR

Cat. No.	Size	Outside Diam. Cover	Depth Over Cover	List Each
VTBLR-111	½	2 9/16	2 3/8	$3.30
VTBLR-222	¾	2 9/16	2 3/8	3.60
VTBLR-33303	1	3 7/16	2 15/16	4.50



Type VTBT

Cat. No.	Size	Outside Diam. Cover	Depth Over Cover	List Each
VTBT-1111	½	2 9/16	2 3/8	$3.50
VTBT-2222	¾	2 9/16	2 3/8	3.90
VTBT-333303	1	3 7/16	2 15/16	4.90



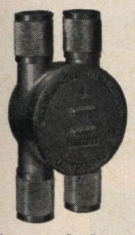
Type VTL

Cat. No.	Size	Outside Diam. Cover	Depth Over Cover	List Each
VTL-11	½	2 9/16	2 3/8	$3.10
VTL-22	¾	2 9/16	2 3/8	3.30

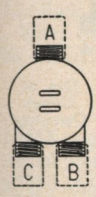
*½-inch size has bottom hub in center of back.

DISCOUNTS: SCHEDULE "AD"

PYLE-NATIONAL PYLETS
YT SERIES JUNCTION PYLETS
With Union Hubs
Explosion-Proof, Dust-Tight and Weather-Resistant
Class I, Group D and Class II, Group G



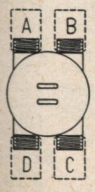
Used for general wiring purposes in hazardous locations, particularly in gasoline dispensing pumps. Pylet bodies have external threads to take overlapping screw covers. Outside diameter of cover is 4 inches. Nominal cover opening is $3\frac{3}{16}$ inches. Standard design is such that the ¾-inch hubs on Pylets without nuts and sleeves are externally threaded 1-inch pipe size and therefore will take 1-inch conduit couplings. Material: Rustproofed Ferrous Alloy.



3-Hub Type

Sleeve Size Inches A	B	C	D	E	With Nuts and Sleeves Cat. No.	List Each	Without Nuts and Sleeves Cat. No.	List Each
					YTYU-			
½	½	½	....	....	111	$7.00	YT-201†	$5.50
¾	¾	¾	....	....	222	7.00		
¾	1	1	....	....	233	9.60	YT-502‡	6.10
¾	1¼	1¼	....	....	244	9.60		
1	1	1	....	....	333	11.80	YT-1002§	7.30
1¼	1¼	1¼	....	....	444	11.80		

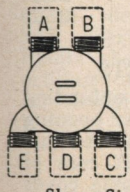
†Takes VC-2-B nuts. ‡Takes VC-4-B nuts, except "A" hub which takes VC-2-B nut. §Takes VC-B-4 nuts.



4-Hub Type

Sleeve Size Inches A	B	C	D	E	With Nuts and Sleeves Cat. No.	List Each	Without Nuts and Sleeves Cat. No.	List Each
					YTHU-			
½	½	½	½	....	1111	$7.90	YT-202†	$5.90
¾	¾	¾	¾	....	2222	7.90		

†Takes VC-2-B nuts.

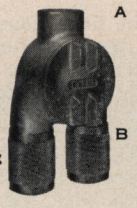


5-Hub Type

Sleeve Size Inches A	B	C	D	E	With Nuts and Sleeves Cat. No.	List Each	Without Nuts and Sleeves Cat. No.	List Each
					YTWU-			
½	½	½	½	½	11111	$8.80	YT-203*	$6.30
¾	¾	¾	¾	¾	22222	8.80		
½	½	½	1	½	11131	10.00	YT-303†	6.50
½	½	½	1¼	½	11141	10.00		
¾	¾	¾	1	¾	22232	10.00		
¾	¾	¾	1¼	¾	22242	10.00		

*Takes VC-2-B nuts. †Takes VC-2-B nuts except "D" hub which takes VC-4-B nuts.

PYLE-NATIONAL PYLETS
TYPE VT JUNCTION PYLETS
With Union Hubs at Bottom and Plain Threaded Covers*
Explosion-Proof, Dust-Tight and Weather-Resistant
Class I, Groups C and D; Class II, Groups E, F and G; and Class III



Used for general wiring purposes in hazardous locations, particularly in gasoline dispensing pumps.

Pylet bodies have internal threads for screw covers. Nominal cover opening is 2 inches. Outside diameter of cover is $2\frac{9}{16}$ inches. Top hub tapped for conduit. Bottom hubs are of the union type to take ¾-inch union nuts and sleeves. Material: Rustproofed Ferrous Alloy.

With Nuts and Sleeves

Type	Hub Nuts Used	Hub Sizes A	B	C	Cat. No.	List Each
3 Hub, 1 Tapped 2 Union	Two ¾" Cat. No. VC-2-B	½	½	½	VTU-111	$4.70
		½	¾	¾	VTU-122	4.70
		¾	½	½	VTU-211	4.80
		¾	¾	¾	VTU-222	4.80
Without Nuts and Sleeves						
3 Hub, 1 Tapped 2 Union	....	½	Take		VT-102	3.70
		¾	VC-2-B		VT-302	3.80

*Other types of covers listed on a preceding page.

UNION HUB NUTS AND SLEEVES
For VT, YT and GJ Series Pylets
Explosion-Proof, Dust-Tight and Weather-Resistant

Used to provide conduit connections to union hubs Combination sizes are obtained by using differe threaded sleeves in corresponding nuts. Blank cap are applied directly to Pylet hubs.

Threaded sleeves are tapered to fit seat in the nuts. Butt contact is made with the flat face of the hub to eliminate springing of conduit when making connections. Nuts and threaded sleeves are knurled for a wrench. Material: Rustproofed steel.



Union Hub Nuts



Union Hub Threaded Sleeves

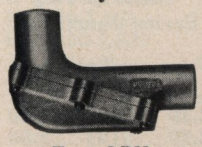


Blank Caps For Unused Union Hubs

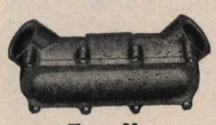
Union Hub Size	Cat. No.	List Each	Conduit Size	Cat. No.	List Each	Cat. No.	List Each
¾	VC-2-B	$.20	½	VC-21	$.30	VC-20-B	$0.30
			¾	VC-22	.30		
1¼	VC-4-B	1.00	1	VC-43	.50	VC-40-B	1.00
			1¼	VC-44	.50		

V SERIES JUNCTION PYLETS
Class I, Groups C and D; Class II, Groups E, F and G Hazardous Locations

Used for pulling and bending conductors especially for motor wiring and for 90° turns in parallel runs of conduit. Pylet bodies have accurately ground, flame-proof cover seats, and are provided with heavy screws. Rustproofed Ferrous Alloy.



Type LBH



Type U

Size Inches	Cat. No.	List Each
	Type LBH	
½	V-10-LBH	$5.60
¾	V-20-LBH	6.00
1	V-30-LBH	15.40
1¼	V-40-LBH	16.00
1½	V-50-LBH	23.00
2	V-60-LBH	24.00
2½	V-70-LBH	50.00
3	V-80-LBH	51.20
	Type U	
2	V-60-U	24.00
3	V-80-U	51.20
4	V-100-U	90.00

DISCOUNTS: SCHEDULE "AD"

PYLE-NATIONAL JUNCTION PYLETS

UNIVERSAL JUNCTION PYLETS TYPES VTFM AND VTM

Explosion-Proof, Dust-Tight and Weather-Resistant

Class I, Groups C and D; Class II, Groups E, F and G; and Class III

Used for general wiring purposes in hazardous locations. Pylet bodies have internal threads for screw covers. Nominal cover opening is 2⅞ inches. Outside diameter of cover is 3 7/16 inches. Depth over cover is 3 3/32 inches. Width over hubs, 4 inches.

Hubs A, B, C and D are always tapped for conduit as listed. Width over hubs is 4 inches. An additional hub in the back can be tapped when specified. Add **$0.30** to list price for ½-inch or ¾-inch back hub tapping. Rustproofed Ferrous Alloy.



Without Flange

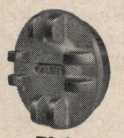
Cat. No.	Size A	B	C	D	List Each
VTM-111103	½	½	½	½	$4.40
VTM-222203	¾	¾	¾	¾	4.80

With Flange

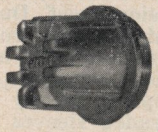
Cat. No.	Size A	B	C	D	List Each
VTFM-111103	½	½	½	½	$5.20
VTFM-222203	¾	¾	¾	¾	5.60



THREADED COVERS FOR JUNCTION PYLETS



Plain



Dome

For VT, VTF and VTM, VTFM Series Junction Pylets—Aluminum Alloy

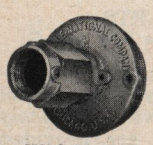
Outside Dia.	Plain Cat. No.	Plain List Each	Dome Depth	Dome Type Cat. No.	Dome Type List Each
2 9/16"	VT-1002*	$1.30	1"	VT-2102*	$1.60
			2"	VT-2202*	1.90
3 7/16"	VT-1003	1.50	1"	VT-2103	1.80
			2"	VT-2203	2.20
4"	VT-1004	2.20	1"	VT-2104	2.30
			2"	VT-2204	2.80
			4"	VT-2404	4.00

For YT Series

Plain		
4"	YT-1‡	2.20

For YV Series

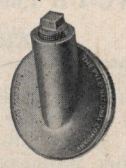
Plain		
..	YV-10‡	2.20



With Union Hub



Tapped for Conduit



With ½" Square Head Pipe Plug

For VT, VTF and VTM, VTFM Series Junction Pylets

Outside Dia.	Union Cat. No.	Union List Each	Tapped Cat. No.	Tapped List Each	Pipe Plug Cat. No.	Pipe Plug List Each
2 9/16"	....	....	4102¶	$2.40	5102	$1.60
3 7/16"	3103¶	$5.50	4103¶	3.10	5103	2.00
3 7/16"	3203•	5.50	4203•	3.50	....	....
4"	....	....	....	....	5104	2.60
	For YT Series					
4"	....	....	....	....	YT-1-S	2.60
	For YV Series					
4"	....	....	....	....	YV-10-S	2.60

*Has two wrench lugs.
‡Has two parallel lugs in center of cover.
¶Fixture stem ½ inch. •Fixture stem ¾ inch.

PYLE-NATIONAL JUNCTION PYLETS

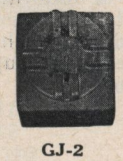
GJ SERIES UNIVERSAL JUNCTION PYLETS

Explosion-Proof, Dust-Tight and Weather-Resistant

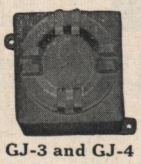
Class I, Group D; Class II, Groups E, F and G; and Class III

Take Threaded or Union Conduit

Pylets can be equipped with threaded hubs or union hubs in sizes and locations as required. Refer to information tables below and furnish a sketch showing arrangement of hubs desired, their type and size. Add price of hubs selected to price of Junction Pylet. Rustproofed ferrous alloy bodies. Cast aluminum alloy covers.



GJ-2



GJ-3 and GJ-4

GJ-5 furnished with four feet

Cat. No.	List Each	Outside Dimensions Including Cover Length	Width	Depth	Dia. of Cover Opening
GJ-2	$5.50	4¾"	4¾"	4 11/32"	3 21/32"
GJ-3	20.00	7"	7"	5½"	5 21/32"
GJ-4	37.00	10"	8"	5¾"	6 29/32"
GJ-6	51.50	10"	8"	8½"	6 29/32"
GJ-5	90.00	12"	12"	8 7/16"	9 13/32"

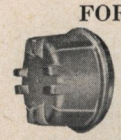
Maximum Size and Number of Hubs That Can Be Used

Body Size	Type Hubs	On Four Sides 1	2	3	4	On Back 1	2
GJ-2	Threaded	2"	1¼"	¾"	...	2"	1¼"
	Union	1½"	1¼"	½"	...	2"	1¼"
GJ-3	Threaded	2½"	2"	1"	¾"	4"	2"
	Union	2½"	2"	1"	¾"	4"	2"
GJ-4	Threaded	2½"	2½"	2"	1¼"	4"	3½
	Union	2½"	2½"	1½"	1¼"	4"	3"
GJ-6	Threaded	4"	2½"	2"	1¼"	4"	3½"
	Union	4"	2½"	1½"	1¼"	4"	3"
GJ-5	Threaded	4"	4"	2½"	1½"	4"	4"
	Union	4"	4"	2"	1½"	4"	4"

Threaded Union Hub Symbols and Prices

Size Inches	Threaded Symbol	Threaded List Each	Union Symbol	Union List Each
½	1	$1.90	W	$2.70
¾	2	2.00	X	2.70
1	3	2.30	Y	3.20
1¼	4	2.70	R	4.40
1½	5	3.40	S	7.10
2	6	4.30	T	9.30
2½	7	6.50	U	13.00
3	8	9.70	V	17.20
3½	9	13.20	P	22.20
4	0	17.20	Q	27.20

THREADED COVERS FOR TYPE GJ JUNCTION PYLETS



Dome covers to permit the extending of conductors outside the cover opening for convenient splicing can be furnished when specified. Deduct cost of flat cover and add cost of dome cover to above Pylet prices.

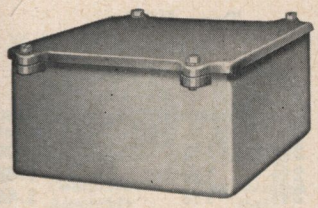
Body Size	Flat Cover† Cat. No.	Flat Cover† List Each	Dome Cover Nominal Depth	Dome Cover Cat. No.	Dome Cover List Each
GJ-2	GJ-200	$2.20	4"	GJ-204	$4.00
GJ-3	GJ-300	6.40	2"	GJ-302	11.80
			4"	GJ-304	13.40
			10"	GJ-310	18.20
GJ-4	GJ-400	13.00	3"	GJ-403	18.30
GJ-5	GJ-500	18.60	4"	GJ-504	22.80

‡ Also available with glass window for instrument boxes.

DISCOUNTS: SCHEDULE "AD"

PYLE-NATIONAL PYLETS

Thick Wall — Rustproofed Ferrous Alloy Weatherproof SJB SERIES—WITH COVER SCREWS OUTSIDE



Complete with overlapping gasketed covers held on by slotted hexagon cap - screws. Regularly furnished less conduit tapping, but boxes can be furnished drilled or tapped for conduit. Specify size and location of conduit outlets, supplying sketch of conduit layout when ordering. Prices for conduit drilling and tapping on request.

When depth of box permits, unless otherwise specified, conduit outlets will be located a sufficient distance from the bottom of the box to allow space for lock-nuts and bushings.

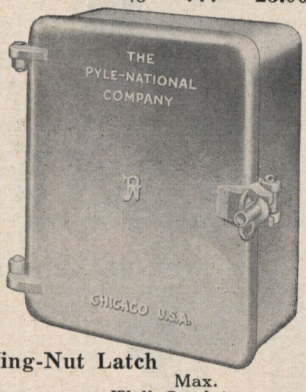
Can be furnished with four mounting-screw lugs at additional list by adding suffix "F" to Cat. No.

Cat. No.	Size, Inches Length	Width	Depth	Wall Thickness	Max. Conduit Size In Sides	*List Each
SJB- 100	4	4	2 1/16	1/4	1	$8.90
SJB- 200	5 1/2	5 1/2	2 3/4	1/4	1 1/2	11.20
SJB- 500†	6 1/4	6 1/4	3 1/2	3/8	2	18.00
SJB- 900†	6 1/4	6 1/4	6 7/16	3/8	4	27.00
SJB-2800†	6 1/4	6 1/4	8 1/16	3/8	4	28.50
SJB- 600	8	6	3 1/2	3/8	2	20.00
SJB- 800	10	6	3 15/16	3/8	2 1/2	25.80
SJB- 300†	10	8	3 1/2	3/8	2	27.00
SJB- 400	11 1/4	11 1/4	5 5/8	3/8	3 1/2	42.50
SJB-2400	12	8	8	3/8	6	53.70
SJB-2700	12	10	3 1/2	3/8	2	42.00
SJB-2600	12	12	7	3/8	4	66.00
SJB-2300	16	8	4 1/2	3/8	3	55.80
SJB- 700†	16	16	16	1/2	6	133.00
SJB-1000	17 1/4	12 3/8	7	3/8	4 1/2	88.00
SJB-1600	24	24	12	1/2	6	183.00
SJB-1700	26	18	8	3/8	6	145.00
Junction Box Extensions					**Rustproofed Ferrous Alloy**	
CRC-100	6 1/4	6 1/4	3 1/2	3/8	...	$11.60
CRC-150	6 1/4	6 1/4	7	3/8	...	15.80
CRC-200	10	8	4	3/8	...	15.00
CRC-250	10	8	8	3/8	...	23.00

HINGED-COVER JUNCTION PYLETS

Thick wall type, Rustproofed Ferrous Alloy, weatherproof.

See description of SJB Series Junction Pylets above regarding drilling and tapping for conduit.



With One Wing-Nut Latch

Cat. No.	Size, Inches Length	Width	Depth	Wall Thickness	Max. Conduit Size In Sides	*List Each
HJB-300	10	8	3 1/2	3/8	2	$28.00
With Wing-Nut Latches and Adjustable Hinge Studs‡						
HB-1400	13 1/8	13 1/8	3 1/8	7/16	1 1/2	63.00
HB-1500	36	16	8	7/16	4	165.00
With Three Wing-Nut Latches						
MS-241410	24	14	10	1/4	4	110.00

*List price less conduit tapping.
†Takes Type CRC Extensions.
‡HB-1400 has two latches; HB-1500 three latches.

PYLE-NATIONAL JUNCTION PYLETS

Thick Wall—Rustproofed Ferrous Alloy Weatherproof

TYPE SJBF WITH COVER-SCREW LUGS INSIDE



Complete with gasketed covers. Regularly furnished less conduit tapping, but can be furnished drilled or tapped for conduit. Specify size and location of conduit outlets, supplying sketch of conduit layout when ordering. Prices for drilling and tapping on request.

When depth of box permits, unless otherwise specified, conduit outlets will be located a sufficient distance from the bottom of box to allow space for locknuts and bushings. Can be furnished with four mounting-screw lugs at additional list by adding suffix "F" to catalog number.

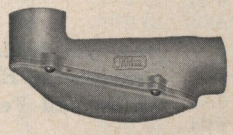
Cat. No.	Size, Inches Length	Width	Depth	Wall Thickness	Max. Conduit Size In Sides	*List Each
SJBF-100	4	4	2	3/16	1	$8.90
SJBF-200	6	3 1/2	2 31/32	3/16	1 1/2	11.00
SJBF-300	5 1/2	5 1/2	3 3/4	1/4	2	14.00
SJBF-400	10	6	4 1/2	3/8	3	22.00

*List price less conduit tapping.

TYPE LBD PYLETS

Rustproofed Ferrous Alloy

With Domed Cover—Less Gasket



Cat. No.	Size Inches	Std. Pkg.	List Each
R-1100-LBD	1/2	25	$ 1.30*
R-2200-LBD	3/4	25	1.60*
R-3300-LBD	1	25	2.40*
R-4400-LBD	1 1/4	10	6.50*
R-5500-LBD	1 1/2	10	11.50*
R-6600-LBD	2	5	12.50*
R-7700-LBD	2 1/2	5	23.50*
R-8800-LBD	3	5	28.50*
R-9900-LBD	3 1/2	5	46.50*
R-10900-LBD	4	5	52.00*

TYPE LBD PYLET GASKETS

Cat. No.	Size Inches	Std. Pkg.	List Each
RK-1100-C	1/2	100	$ 0.20*
RK-2200-C	3/4	100	.30*
RK-3300-C	1	50	.40*
RK-4400-C	1 1/4	50	.60*
RK-5500-C	1 1/2 or 2	25	1.20*
RK-7700-C	2 1/2 or 3	25	3.00*
RK-9900-C	3 1/2 or 4	10	3.50*

DISCOUNTS: SCHEDULE "AD"
*Except LBD PYLETS—SCHEDULE "JF"

PYLE-NATIONAL CONDUIT FITTINGS

CONDUIT ELBOWS

Explosion-Proof and Dust-Tight



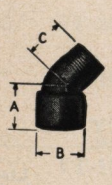
Type VEL
45 Degree Elbow
Female

Cat. No.	Size Inches	Dimensions A	B	C	List Each
VEL-1145	½	1 5/32	1¼	.....	$0.40
VEL-2245	¾	1 3/16	1½	.....	.50
VEL-3345	1	1⅜	1¾	.....	.70
VEL-4445	1¼	1⅝	2¼	.....	1.30
VEL-5545	1½	2⅛	2½	.....	1.50



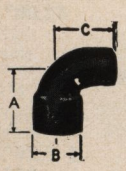
Type VEL
90 Degree Elbow
Female

Cat. No.	Size Inches	Dimensions A	B	C	List Each
VEL-1190	½	1⅝	1¼	.....	$0.50
VEL-2290	¾	1¾	1½	.....	.70
VEL-3390	1	2	1¾	.....	.90
VEL-4490	1¼	2⅜	2¼	.....	1.50
VEL-5590	1½	3 5/16	2½	.....	3.00
VEL-6690	2	4	3	.....	5.00
VEL-8890	3	5½	4¼	.....	11.00



Type VELM
45 Degree Elbow
Male and Female

Cat. No.	Size Inches	Dimensions A	B	C	List Each
VELM-1145	½	1 5/32	1⅛	1 3/32	$1.20
VELM-2245	¾	1¼	1 11/32	1⅛	1.40
VELM-3345	1	1½	1¾	1 5/16	1.70
VELM-4445	1¼	1¾	2¼	1 7/16	2.00
VELM-5545	1½	2 3/16	2½	2⅛	4.00



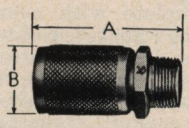
Type VELM
90 Degree Elbow
Male and Female

Cat. No.	Size Inches	Dimensions A	B	C	List Each
VELM-1190	½	1⅝	1⅛	1 7/16	$1.20
VELM-2290	¾	1¾	1 11/32	1 9/16	1.40
VELM-3390	1	2⅛	1¾	1⅞	1.70
VELM-4490	1¼	2¼	2¼	1 15/16	2.00
VELM-5590	1½	3	2½	3	4.00

PYLE-NATIONAL CONDUIT FITTINGS

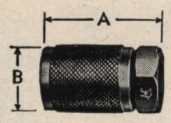
CONDUIT UNIONS

Explosion-Proof and Dust-Tight



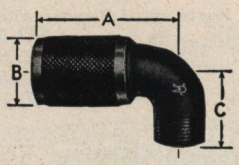
Type VCC
Male
Rustproofed Steel

Cat. No.	Size Inches	Dimensions A	B	C	List Each
VCC-1	½	2 25/32	1¼	.....	$1.00
VCC-21	*¾–½	2 31/32	1 7/16	.....	1.45
VCC-2	¾	2 31/32	1 7/16	.....	1.45
VCC-3	1	3 3/32	1⅞	.....	2.50
VCC-4	1¼	3 5/16	2¼	.....	3.90
VCC-5	1½	3 11/32	2¾	.....	5.00
VCC-6	2	3 11/16	3⅛	.....	6.40
VCC-7	2½	4⅝	3⅞	.....	10.10
VCC-8	3	4⅝	4⅝	.....	13.75
VCC-9	3½	4⅝	5⅛	.....	22.40
VCC-10	4	4⅝	5¾	.....	25.60



Type VCCF
Female
Rustproofed Steel

Cat. No.	Size Inches	Dimensions A	B	C	List Each
VCCF-1	½	2 3/32	1¼	.....	$0.90
VCCF-21	*¾–1	2 3/32	1 7/16	.....	1.25
VCCF-2	¾	2 7/32	1 7/16	.....	1.25
VCCF-3	1	2 15/32	1⅞	.....	2.30
VCCF-4	1¼	2⅝	2¼	.....	3.50
VCCF-5	1½	2 13/16	2¾	.....	4.55
VCCF-6	2	2 13/16	3⅛	.....	5.95
VCCF-7	2½	3½	3⅞	.....	8.20
VCCF-8	3	3½	4⅝	.....	11.85
VCCF-9	3½	3½	5⅛	.....	18.75
VCCF-10	4	3½	5¾	.....	21.95



Type VCC — Male
90-Degree Elbow

Cat. No.	Size Inches	Dimensions A	B	C	List Each
VCC-190	½	2 17/32	1¼	1⅜	$2.80
VCC-2190	*¾–½	2 23/32	1 7/16	1½	2.80
VCC-290	¾	2 23/32	1 7/16	1½	2.80
VCC-390	1	3 7/32	1⅞	1 13/16	3.40
VCC-490	1¼	3⅛	2¼	2	5.30

*Body size given first.

TYPE RB AND RBS PIPE PLUGS



Type RB



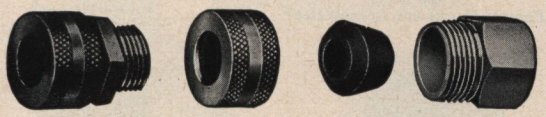
Type RBS

Size Inches	Std. Pkg.	Recessed Pipe Plugs Cat. No.	List Each	Square Head Pipe Plugs Cat. No.	List Each
½	200	RB-10	$0.16	RBS-10	$0.16
¾	100	RB-20	.20	RBS-20	.20
1	50	RB-30	.24	RBS-30	.24
1¼	50	RB-40	.30	RBS-40	.30
1½	25	RB-50	.40	RBS-50	.40
2	10	RB-60	.76	RBS-60	.76
2½	5	RB-70	1.20	RBS-70	1.20
3	5	RB-80	1.80	RBS-80	1.80

PYLE-NATIONAL PORTABLE CORD AND CABLE GRIPS

Complete with aluminum body, plain aluminum compression nut and single hole rubber grommet.

Male Thread — Female Thread



Complete Assembly — Compression Nut — Grommet — Body

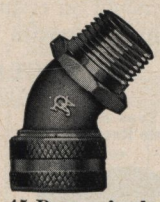
(Exploded View)

Male Cat. No.	Male List Each	Size Conduit	Size Cord or Cable	Female Cat. No.	Female List Each
DB-4316	$0.80	⅜	.125 to .187	DBF-4316	$0.80
DB-4516	.80	⅜	.250 to .312	DBF-4516	.80
DB-438	.80	⅜	.312 to .375	DBF-438	.80
DB-4	.80	⅜	.375 to .437	DBF-4	.80
DB-938	1.00	⅜	.375 to .500	.....	.....
DB-1038	1.00	⅜	.500 to .625*	.....	.....
DB-3316	.80	½	.125 to .187	DBF-3316	.80
DB-3516	.80	½	.250 to .312	DBF-3516	.80
DB-338	.80	½	.312 to .375	DBF-338	.80
DB-3	.80	½	.375 to .437	DBF-3	.80
DB-9	1.00	½	.375 to .500	DBF-9	1.30
DB-10	1.00	½	.500 to .625	DBF-10	1.30
DB-934	2.00	½	.625 to .750*	.....	.....
DB-614	1.00	¾	.125 to .250	DBF-614	1.30
DB-638	1.00	¾	.250 to .375	DBF-638	1.30
DB-6716	1.00	¾	.312 to .437	DBF-6716	1.30
DB-612	1.00	¾	.375 to .500	DBF-612	1.30
DB-6916	1.00	¾	.437 to .562	DBF-6916	1.30
DB-6	1.00	¾	.500 to .625	DBF-6	1.30
DB-11	2.00	¾	.625 to .750	DBF-11	2.00
DB-111316	2.00	¾	.687 to .812	.....	.....
DB-1178	2.00	¾	.750 to .875*	DBF-1178	2.60
DB-3338	2.00	1	.250 to .375	.....	.....
DB-3312	2.00	1	.375 to .500	.....	.....
DB-3358	2.00	1	.500 to .625	.....	.....
DB-331116	2.00	1	.562 to .687	.....	.....
DB-33	2.00	1	.625 to .750	DBF-1234	2.60
.....	.....	1	.687 to .812	DBF-121316	2.60
DB-12	2.00	1	.750 to .875	DBF-12	2.60
DB-14	2.80	1	.875 to 1.000	DBF-14	3.10
DB-14118	3.80	1	1.000 to 1.125*	DBF-14118	3.80
DB-1334	3.80	1¼	.625 to .750	DBF-1334	3.80
DB-1378	3.80	1¼	.750 to .875	DBF-1378	3.80
DB-131516	3.80	1¼	.812 to .937	DBF-131516	3.80
DB-131	3.80	1¼	.875 to 1.000	DBF-131	3.80
DB-13	3.80	1¼	1.000 to 1.125	DBF-13	3.80
DB-15	3.80	1¼	1.125 to 1.250	DBF-15	3.80
DB-13112	5.50	1¼	1.375 to 1.500*	.....	.....
DB-1634	3.80	1½	.625 to .750	DBF-1634	4.30
DB-1678	3.80	1½	.750 to .875	DBF-1678	4.30
DB-161516	3.80	1½	.812 to .937	DBF-161516	4.30
DB-161	3.80	1½	.875 to 1.000	DBF-161	4.30
DB-16118	3.80	1½	1.000 to 1.125	DBF-16118	4.30
DB-16114	3.80	1½	1.125 to 1.250	DBF-16114	4.30
DB-16	3.80	1½	1.250 to 1.375	DBF-16	5.50
DB-16112	5.50	1½	1.375 to 1.500	.....	.....
DB-16158	5.50	1½	1.500 to 1.625	.....	.....
DB-178	5.50	2	.875 to 1.000	DBF-178	6.50
DB-17118	5.50	2	1.000 to 1.125	DBF-17118	6.50
DB-17114	5.50	2	1.125 to 1.250	DBF-17114	6.50
DB-17138	5.50	2	1.250 to 1.375	DBF-17138	6.50
DB-17	5.50	2	1.375 to 1.500	DBF-17	6.50
DB-18	5.50	2	1.500 to 1.625	DBF-18	6.50
DB-19	5.50	2	1.625 to 1.750	DBF-19	6.50
DB-20▲	8.70	2½	1.625 to 1.750	.....	.....
DB-21▲	8.70	2½	1.750 to 1.875	.....	.....
DB-22▲	8.70	2½	1.875 to 2.000	.....	.....
DB-26178	9.90	3	1.750 to 1.875	.....	.....
DB-26	9.90	3	2.156 to 2.281	.....	.....
DB-26238	9.90	3	2.250 to 2.375	.....	.....

▲Has Phenolic compression nut and rustproofed steel body.

*Maximum size cord will not pass through body without removing outer covering.

PYLE-NATIONAL PORTABLE CORD AND CABLE GRIPS



45-Degree Angle

MALE THREAD

Complete with rustproofed ferrous alloy body, plain aluminum compression nut and single hole rubber grommet.



90-Degree Angle

45 Degree Angle Type Male Thread

Cat. No.	Size Conduit	Size Cord or Cable	Bore of Body	List Each
DB-745	½	.125 to .250	⅝	$1.60
DB-845	½	.250 to .375	⅝	1.60
DB-945	½	.375 to .500	⅝	1.60
DB-1045	½	.500 to .625*	⅝	1.60
DB-1171645	¾	.312 to .437	¾	2.60
DB-111245	¾	.375 to .500	¾	2.60
DB-1191645	¾	.437 to .562	¾	2.60
DB-115845	¾	.500 to .625	¾	2.60
DB-1145	¾	.625 to .750*	¾	2.60
DB-123445	1	.625 to .750	⅞	2.60
DB-12131645	1	.687 to .812	⅞	2.60
DB-1245	1	.750 to .875*	⅞	2.60
DB-1445	1	.875 to 1.000	1 1/32	4.50
DB-133445	1¼	.625 to .750	1¼	4.50
DB-137845	1¼	.750 to .875	1¼	4.50
DB-13151645	1¼	.812 to .937	1¼	4.50
DB-13145	1¼	.875 to 1.000	1¼	4.50
DB-1345	1¼	1.000 to 1.125	1¼	4.50
DB-1545	1¼	1.125 to 1.250*	1¼	4.50
DB-1513845	1¼	1.250 to 1.375*	1¼	5.30

90 Degree Angle Type Male Thread

DB-790	½	.125 to .250	⅝	$1.60
DB-890	½	.250 to .375	⅝	1.60
DB-990	½	.375 to .500	⅝	1.60
DB-1090	½	.500 to .625*	⅝	1.60
DB-1171690	¾	.312 to .437	¾	2.60
DB-111290	¾	.375 to .500	¾	2.60
DB-1191690	¾	.437 to .562	¾	2.60
DB-115890	¾	.500 to .625	¾	2.60
DB-1190	¾	.625 to .750*	¾	2.60
DB-123490	1	.625 to .750	⅞	2.60
DB-12131690	1	.687 to .812	⅞	2.60
DB-1290	1	.750 to .875*	⅞	2.60
DB-1490	1	.875 to 1.000	1 1/32	4.50
DB-133490	1¼	.625 to .750	1¼	4.50
DB-137890	1¼	.750 to .875	1¼	4.50
DB-13151690	1¼	.812 to .937	1¼	4.50
DB-13190	1¼	.875 to 1.000	1¼	4.50
DB-1390	1¼	1.000 to 1.125	1¼	4.50
DB-1590	1¼	1.125 to 1.250*	1¼	4.50

*Cord or cable will not pass through body without removing outer covering.

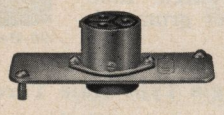
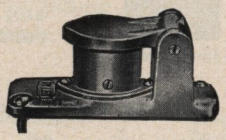
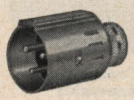
PYLE-NATIONAL MIDGET TRIPLOC PLUGS AND RECEPTACLES

10 Amperes, 250 Volts; 15 Amperes, 125 Volts

Complete with Round Prong Type Contact Units, formerly furnished with flat blade contacts. Information on other types and sizes furnished on request.

Receptacles take any Plug grouped opposite the Receptacle listings.

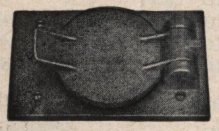
FOR RECTANGULAR PYLETS

(Patents Issued and Pending)	Type RAO Female Receptacles*		Type RXO Female Receptacles*		Type RAD Female Connector Receptacles*			Type PAD Male Plugs* Automatic Lock — Manual Release	
	 Plain Housing without Gasket		 Hinged Spring Door Housing with Gasket		 With Rubber Bushing Cord Grip Take Type PAD Male Plugs at Right			 With Rubber Bushing Cord Grip	
Pylet Size	Cat. No.	List Each	Cat. No.	List Each	Diameter Cord	Cat. No.	List Each	Cat. No.	List Each
Style "H" — With No Provision for Grounding									
2-Wire, 2-Pole									
½	RAO-125221	$3.40	RXO-125221	$4.40	.250 to .312	RAD-2125221	$4.85	PAD-2125221	$4.55
¾	RAO-225221	3.50	RXO-225221	4.50	.312 to .375	RAD-325221	4.85	PAD-325221	4.55
1	RAO-325221	3.70	RXO-325221	4.70	.375 to .437	RAD-3125221	4.85	PAD-3125221	4.55
					.437 to .500	RAD-425221	5.05	PAD-425221	4.75
					.500 to .625	RAD-525221	5.05	PAD-525221	4.75
3-Wire, 3-Pole									
½	RAO-125321	3.60	RXO-125321	4.60	.250 to .312	RAD-2125321	5.05	PAD-2125321	4.75
¾	RAO-225321	3.70	RXO-225321	4.70	.312 to .375	RAD-325321	5.05	PAD-325321	4.75
1	RAO-325321	3.90	RXO-325321	4.90	.375 to .437	RAD-3125321	5.05	PAD-3125321	4.75
					.437 to .500	RAD-425321	5.25	PAD-425321	4.95
					.500 to .625	RAD-525321	5.25	PAD-525321	4.95
4-Wire, 4-Pole									
½	RAO-125421	3.90	RXO-125421	4.90	.250 to .312	RAD-2125421	5.35	PAD-2125421	5.05
¾	RAO-225421	4.00	RXO-225421	5.00	.312 to .375	RAD-325421	5.35	PAD-325421	5.05
1	RAO-325421	4.20	RXO-325421	5.20	.375 to .437	RAD-3125421	5.35	PAD-3125421	5.05
					.437 to .500	RAD-425421	5.55	PAD-425421	5.25
					.500 to .625	RAD-525421	5.55	PAD-525421	5.25
Style "J" — Grounded Through Shell and Extra Pole									
2-Wire, 3-Pole									
½	RAO-125321-G	3.90	RXO-125321-G	4.90	.250 to .312	RAD-2125321-G	5.35	PAD-2125321-G	5.05
¾	RAO-225321-G	4.00	RXO-225321-G	5.00	.312 to .375	RAD-325321-G	5.35	PAD-325321-G	5.05
1	RAO-325321-G	4.20	RXO-325321-G	5.20	.375 to .437	RAD-3125321-G	5.35	PAD-3125321-G	5.05
					.437 to .500	RAD-425321-G	5.55	PAD-425321-G	5.25
					.500 to .625	RAD-525321-G	5.55	PAD-525321-G	5.25
3-Wire, 4-Pole									
½	RAO-125421-G	4.20	RXO-125421-G	5.20	.250 to .312	RAD-2125421-G	5.65	PAD-2125421-G	5.35
¾	RAO-225421-G	4.30	RXO-225421-G	5.30	.312 to .375	RAD-325421-G	5.65	PAD-325421-G	5.35
1	RAO-325421-G	4.50	RXO-325421-G	5.50	.375 to .437	RAD-3125421-G	5.65	PAD-3125421-G	5.35
					.437 to .500	RAD-425421-G	5.85	PAD-425421-G	5.55
					.500 to .625	RAD-525421-G	5.85	PAD-525421-G	5.55

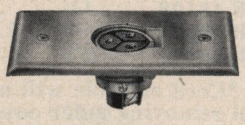
*Receptacle can be furnished with Male Contact Units for Female Plugs and Plugs can be furnished with Female Contact Units for Male Receptacles when specified.

MIDGET TRIPLOC RECEPTACLES

For FS and FD Series Pylets



Type RXF
Hinged Spring Door Housing with Gasket

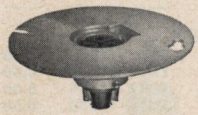


Type RAW
Plain Housing Without Gasket

STYLE "H"—With No Provision for Grounding

Cat. No.	List Each	Poles	Cat. No.	List Each
RXF-25221	$4.90	2	RAW-25221	$3.70
RXF-25321	5.10	3	RAW-25321	3.90
RXF-25421	5.40	4	RAW-25421	4.20
STYLE "J"—With One Pole Grounded				
RXF-25321-G	5.40	3	RAW-25321-G	4.20
RXF-25421-G	5.70	4	RAW-25421-G	4.50

TYPE RAPF MIDGET TRIPLOC RECEPTACLES



Type RAPF

For 3¼-inch and 4-inch outlet boxes, also Types BODS and BODN Pylets.

Housings are of rustproofed pressed steel. Insulation, moulded phenolic.

STYLE "H"—With No Provision for Grounding

Poles	For 3¼-Inch Outlet Box — Cat. No.	List Each	For 4-Inch Outlet Box — Cat. No.	List Each
2	RAPF-325221	$4.90	RAPF-425221	$4.90
3	RAPF-325321	5.10	RAPF-425321	5.10
4	RAPF-325421	5.40	RAPF-425421	5.40
STYLE "J"—With One Pole Grounded				
3	RAPF-325321-G	5.40	RAPF-425321-G	5.40
4	RAPF-325421-G	5.70	RAPF-425421-G	5.70

DISCOUNTS: SCHEDULE "AD"

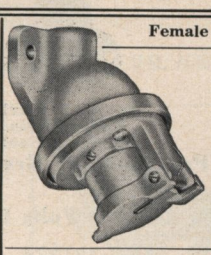
PYLE-NATIONAL TRIPLOC PLUGS AND RECEPTACLES
COMPLETE WITH CONTACT UNIT

RATINGS*: 2, 3 and 4-Pole—20 Amperes, 125-250 Volts D.C., 460 Volts A.C.; 0.2 Ampere, 600 Volts D.C.
6, 8 and 12-Pole—5 Amperes, 125 Volts D.C.; 1.5 Amperes, 250 Volts D.C.;
15 Amperes, 460 Volts A.C.; 0.2 Ampere, 600 Volts D.C.

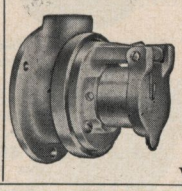
Rustproofed Ferrous Alloy Bodies, Phenolic Insulation **Rustproofed Steel Bodies, Phenolic Insulation**

, 3 and 4-Pole
e back wired
ding screw
minals.

, 8 and 12-Pole
e back wired
der type ter-
als.



Angle Type With Gasket



Straight Type With Gasket

Female Receptacles — Lineside
With Spring Door Housing

Female Receptacles take any size APD male plug bracketed in last column at right

With Rubber Bushing Cord Grip



Female Receptacles Lineside
Pendent or Connector Type

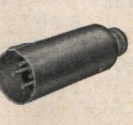


Male Plugs Lineside
Automatic Lock With Manual Release

For Circuits	Cat. No.	List Each	Hub Size	Cat. No.	List Each	Cord Grip Size◆	Cat. No.	List Each	Cat. No.	List Each
2-Wire, 2-Pole▲ New Style	XRBB-121221	$7.40	½	XRA-121221	$7.20	.375 to .500 .500 to .625 .625 to .750	ARD-421221 ARD-521221 ARD-621221	$5.25 5.25 5.25	APD-421221 APD-521221 APD-621221	$5.05 5.05 5.05
2-Wire, 2-Pole▲ Old Style	XRBB-120221	7.40	½	XRA-120221	7.20	.375 to .500 .500 to .625 .625 to .750	ARD-420221 ARD-520221 ARD-620221	5.25 5.25 5.25	APD-420221 APD-520221 APD-620221	5.05 5.05 5.05
3-Wire, 3-Pole	XRBB-220321	7.80	¾	XRA-220321	7.60	.375 to .500 .500 to .625 .625 to .750	ARD-420321 ARD-520321 ARD-620321	5.45 5.45 5.45	APD-420321 APD-520321 APD-620321	5.25 5.25 5.25
4-Wire, 4-Pole	XRBB-220421	8.00	¾	XRA-220421	7.80	.375 to .500 .500 to .625 .625 to .750	ARD-420421 ARD-520421 ARD-620421	5.65 5.65 5.65	APD-420421 APD-520421 APD-620421	5.45 5.45 5.45
6-Wire, 6-Pole	XRBB-310621	9.80	1	.....		.500 to .625† .625 to .750†	ARD-510621 ARD-610621	7.05 7.05	APD-510621 APD-610621	6.85 6.85
8-Wire, 8-Pole	XRBB-310821	10.80	1	.....		.500 to .625† .625 to .750†	ARD-510821 ARD-610821	8.05 8.05	APD-510821 APD-610821	7.85 7.85
12-Wire, 12-Pole	XRBB-3101221	14.15	1	.....		.625 to .750†	ARD-6101221	11.40	APD-6101221	11.20
2-Wire, 3-Pole	XRBB-220321-G	8.00	¾	XRA-220321-G	7.80	.375 to .500 .500 to .625 .625 to .750	ARD-420321-G ARD-520321-G ARD-620321-G	5.65 5.65 5.65	APD-420321-G APD-520321-G APD-620321-G	5.45 5.45 5.45
3-Wire, 4-Pole	XRBB-220421-G	8.20	¾	XRA-220421-G	8.00	.375 to .500 .500 to .625 .625 to .750	ARD-420421-G ARD-520421-G ARD-620421-G	5.85 5.85 5.85	APD 420421-G APD-520421-G APD-620421-G	5.65 5.65 5.65
5-Wire, 6-Pole	XRBB-310621-G	10.00	1	.....		.500 to .625† .625 to .750†	ARD-510621-G ARD-610621-G	7.25 7.25	APD-510621-G APD-610621-G	7.05 7.05
7-Wire, 8-Pole	XRBB-310821-G	11.00	1	.....		.500 to .625† .625 to .750†	ARD-510821-G ARD-610821-G	8.25 8.25	APD-510821-G APD-610821-G	8.05 8.05
11-Wire, 12-Pole	XRBB-3101221-G	14.35	1	.....		.625 to .750†	ARD-6101221-G	11.60	APD-6101221-G	11.40

With No Provision for Grounding
Grounded Through Shell and Extra Pole

TRIPLOC FUSIBLE MALE PLUGS — Lineside
For Above Receptacles — Take 250 Volt Cartridge Fuses, Fusetrons or Trions (N.E.C. Standard)



With Side Wired Binding Screw Terminals			For Circuits	Type	Diameter Cord◆	Cat. No.	List Each
APFD	Style "J" Grounded Through Shell and Extra Pole	2-Wire, 3-Pole—2-Poles Fusible	With Rubber Bushing Cord Grip	.375 to .500 .500 to .625 .625 to .750	APFD-420321-G APFD-520321-G APFD-620321-G	$13.60 13.60 13.60
	Automatic Lock With Manual Release	3-Wire, 4-Pole—3 Poles Fusible‡		.375 to .500 .500 to .625 .625 to .750	APFD-4203421-G APFD-5203421-G APFD-6203421-G	15.60 15.60 15.60

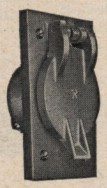
sted by Underwriters Laboratories, Inc. in all ratings except 600 Volts, D.C. ‡Also available with two poles fusible.
rm 3 — Sizes .375″ to .625″ formerly furnished with Form 2 Compression Nut and Grommet. † Sizes up to 1.000″ also available.
AUTION: Use new style to avoid interchangeability with Four Pole types. Old and new style, 2-Wire, 2-Pole have unmatching contact spacing.

DISCOUNTS: SCHEDULE "AD"
P-5559-P

PYLE-NATIONAL TRIPLOC RECEPTACLES

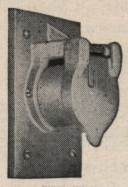
With Interchangeable and Reversible Contact Units
(Patents Issued and Pending)
Take Type APD and APFD Triploc Plugs

WITH HINGED SPRING DOOR



Type XRF
Flush
For FD Deep
Series Pylets

Complete with Gaskets



Type XRR
Surface
For FS Shallow
Series Pylets

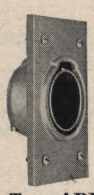
STYLE "H"—With No Provision for Grounding

Cat. No.	List Price	Poles	Cat. No.	List Price
20 Ampere, 460 Volts, A.C.; 250 Volts, D.C.				
XRF-21221	$5.60	2▲	XRR-21221	$5.60
XRF-20221	5.60	2●	XRR-20221	5.60
XRF-20321	5.80	3	XRR-20321	5.80
XRF-20421	6.00	4	XRR-20421	6.00
15A., 460V., AC; 5A., 125V., DC; 1.5A., 250V., DC				
XRF-10621	7.40	6	XRR-10621	7.40
XRF-10821	8.40	8	XRR-10821	8.40
XRF-101221	11.75	12	XRR-101221	11.75

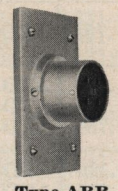
STYLE "J"—With One Pole Grounded

20 Ampere, 460 Volts, A.C.; 250 Volts, D.C.				
XRF-20321-G	6.00	3	XRR-20321-G	6.00
XRF-20421-G	6.20	4	XRR-20421-G	6.20
15A., 460V., AC; 5A., 125V., DC; 1.5A., 250V., DC				
XRF-10621-G	7.60	6	XRR-10621-G	7.60
XRF-10821-G	8.60	8	XRR-10821-G	8.60
XRF-101221-G	11.95	12	XRR-101221-G	11.95

PLAIN HOUSING



Type ARF
Flush
For FD Deep
Series Pylets



Type ARR
Surface
For FS Shallow
Series Pylets

STYLE "H"—With No Provision for Grounding

Cat. No.	List Price	Poles	Cat. No.	List Price
20 Ampere, 460 Volts, A.C.; 250 Volts D.C.				
ARF-21221	$5.10	2▲	ARR-21221	$5.10
ARF-20221	5.10	2●	ARR-20221	5.10
ARF-20321	5.30	3	ARR-20321	5.30
ARF-20421	5.50	4	ARR-20421	5.50
15A., 460V., AC; 5A., 125V., DC; 1.5A., 250V., DC.				
ARF-10621	6.90	6	ARR-10621	6.90
ARF-10821	7.90	8	ARR-10821	7.90
ARF-101221	11.25	12	ARR-101221	11.25

STYLE "J"—With One Pole Grounded

20 Ampere, 460 Volts, A.C.; 250 Volts, D.C.				
ARF-20321-G	5.50	3	ARR-20321-G	5.50
ARF-20421-G	6.70	4	ARR-20421-G	5.70
15A., 460V., AC; 5A., 125V., DC; 1.5A., 250V., DC.				
ARF-10621-G	7.10	6	ARR-10621-G	7.10
ARF-10821-G	8.10	8	ARR-10821-G	8.10
ARF-101221-G	11.45	12	ARR-101221-G	11.45

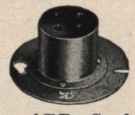
●Old Style. ▲New Style. Caution: Use new style to avoid interchangeability with 4 pole types. Old and new style have unmatching contact spacing.

PYLE-NATIONAL TRIPLOC RECEPTACLES

For 3¼-Inch and 4-Inch Outlet Boxes, Also Type BODS Pylets
TYPES XRP AND ARP TRIPLOC RECEPTACLES
Take Type APD Triploc Plugs



Type XRP—Surface
Hinged Spring Door
Ferrous Alloy



Type ARP—Surface
Plain Housing
Pressed Steel

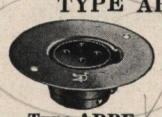
STYLE "H"—With No Provision for Grounding

Cat. No.	List Each	Poles	Cat. No.	List Each
20 Ampere, 460 Volts AC; 250 Volts DC				
For 3¼-Inch Outlet Box				
XRP-321221	$5.80	2▲	ARP-321221	$5.30
XRP-320221	5.80	2●	ARP-320221	5.30
XRP-320321	6.00	3	ARP-320321	5.50
XRP-320421	6.20	4	ARP-320421	5.70
For 4-Inch Outlet Box				
XRP-421221	5.80	2▲	ARP-421221	5.30
XRP-420221	5.80	2●	ARP-420221	5.30
XRP-420321	6.00	3	ARP-420321	5.50
XRP-420421	6.20	4	ARP-420421	5.70
15A., 460V., AC; 5A., 125V., DC; 1.5A., 250V., DC				
For 3¼-Inch Outlet Box				
XRP-310621	7.60	6	ARP-310621	7.10
XRP-310821	8.60	8	ARP-310821	8.10
XRP-3101221	11.95	12	ARP-3101221	11.45
For 4-Inch Outlet Box				
XRP-410621	7.60	6	ARP-410621	7.10
XRP-410821	8.60	8	ARP-410821	8.10
XRP-4101221	11.95	12	ARP-4101221	11.45

STYLE "J"—With One Pole Grounded

20 Ampere, 460 Volts AC; 250 Volts DC				
For 3¼-Inch Outlet Box				
XRP-320321-G	$6.20	3	ARP-320321-G	$5.70
XRP-320421-G	6.40	4	ARP-320421-G	5.90
For 4-Inch Outlet Box				
XRP-420321-G	6.20	3	ARP-420321-G	5.70
XRP-420421-G	6.40	4	ARP-420421-G	5.90
15A., 460V., AC; 5A., 125V., DC; 1.5A., 250V., DC				
For 3¼-Inch Outlet Box				
XRP-310621-G	7.80	6	ARP-310621-G	7.30
XRP-310821-G	8.80	8	ARP-310821-G	8.30
XRP-3101221G	12.15	12	ARP-3101221G	11.65
For 4-Inch Outlet Box				
XRP-410621-G	7.80	6	ARP-410621-G	7.30
XRP-410821-G	8.80	8	ARP-310821-G	8.30
XRP-4101221G	12.15	12	ARP-4101221G	11.65

TYPE ARPF TRIPLOC RECEPTACLES
For 4-Inch Outlet Boxes



Type ARPF
Flush—Plain
Pressed Steel

Fit only outlet boxes having a minimum inside depth of 2⅛ inches.

Type ARPF Triploc Receptacles take Type APD Triploc Plugs.

STYLE "H"—With No Provision for Grounding

Cat. No.	Poles	Amperes 460V AC	Amperes 125V DC	Amperes 250V DC	List Each
ARPF-421221	2▲	20	20	20	$5.60
ARPF-420221	2●	20	20	20	5.60
ARPF-420321	3	20	20	20	5.80
ARPF-420421	4	20	20	20	6.00
ARPF-410621	6	15	5	1.5	7.40
ARPF-410821	8	15	5	1.5	8.40
ARPF-4101221	12	15	5	1.5	11.75
STYLE "J"—With One Pole Grounded					
ARPF-420321-G	3	20	20	20	6.00
ARPF-420421-G	4	20	20	20	6.20
ARPF-410621-G	6	15	4	1.5	7.60
ARPF-410821-G	8	15	5	1.5	8.60
ARPF-4101221-G	12	15	5	1.5	11.95

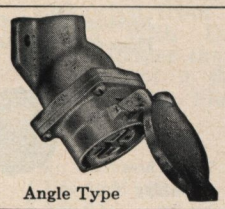
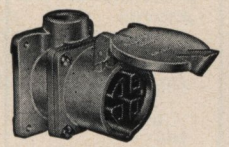
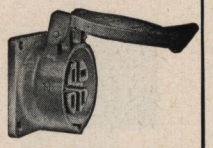
●Old Style. ▲New Style. Caution: Use new style to avoid interchangeability with 4-pole types. Old and new style have unmatching contact spacing.

PYLE-NATIONAL QUELARC CIRCUIT BREAKING PLUGS AND RECEPTACLES

20, 30, 60 AND 100-AMPERE—250 VOLTS D.C., 600 VOLTS A.C.

Spring Door Type—Weather Resistant (Raintight) When Door Is Inclined Downward

Rustproofed Ferrous Alloy Receptacles—Aluminum Alloy Plugs—Molded Phenolic Insulation.

Types KRCBB, JRCBB, KRCA and JRCA Receptacles†						Types KRC and JRC Receptacle Housings†		Types KPD and JPD Plugs†		
Style "K" Grounded Through Shell Style "J" Grounded Through Shell and Extra Pole		 Angle Type		 Straight Type		 Complete With Gasket		Receptacles at Left Take Plugs of Both Cable Sizes  Without Clamping Nut		
		With Spring Door Housing				Spring Door		With Rubber Bushing Cord Grip		
For Circuits	Size	Cat. No.	List Each	Cat. No.	List Each	Cat. No.	List Each	Diameter of Cable‡	Cat. No.	List Each
20-Ampere — Style "K," Grounded Through Shell — Form 30										
2-Wire, 2-Pole	½ ¾	KRCBB-12026 KRCBB-22026	$12.90 13.10	KRCA-12026 KRCA-22026	$12.70 12.90	KRC-220	$10.90	.250 to .625 .625 to .875	KPD-52026 KPD-72026	$11.00 11.00
30-Ampere — Style "K," Grounded Through Shell — Form 30										
2-Wire, 2-Pole	½ ¾	KRCBB-13026 KRCBB-23026	14.50 14.70	KRCA-13026 KRCA-23026	14.30 14.50	KRC-230	12.50	.250 to .625 .625 to .875	KPD-53026 KPD-73026	12.30 12.30
3-Wire, 3-Pole	¾ 1	KRCBB-23036 KRCBB-33036	15.70 15.90	KRCA-23036 KRCA-33036	15.50 15.70	KRC-330	13.50	.250 to .625 .625 to 1.000	KPD-53036 KPD-83036	13.60 13.60
4-Wire, 4-Pole	¾ 1	KRCBB-23046 KRCBB-33046	17.30 17.50	KRCA-23046 KRCA-33046	17.10 17.30	KRC-430	15.10	.375 to .625 .625 to 1.000	KPD-53046 KPD-83046	15.20 15.20
30-Ampere — Style "J," Grounded Through Shell and Extra Pole — Form 30										
2-Wire, 3-Pole	¾ 1	JRCBB-23036 JRCBB-33036	17.70 17.90	JRCA-23036 JRCA-33036	17.50 17.70	JRC-330	15.50	.250 to .625 .625 to 1.000	JPD-53036 JPD-83036	15.60 15.60
3-Wire, 4-Pole	¾ 1	JRCBB-23046 JRCBB-33046	19.30 19.50	JRCA-23046 JRCA-33046	19.10 19.30	JRC-430	17.10	.375 to .625 .625 to 1.000	JPD-53046 JPD-83046	17.20 17.20
60-Ampere — Style "K," Grounded Through Shell — Form 60										
3-Wire, 3-Pole	1 1¼	KRCBB-36036 KRCBB-46036	25.30 25.50	KRCA-36036 KRCA-46036	25.00 25.20	KRC-360	22.00	.625 to 1.000 1.000 to 1.250	KPD-86036 KPD-106036	19.00 19.00
4-Wire, 4-Pole	1¼ 1½	KRCBB-46046 KRCBB-56046	29.50 29.70	KRCA-46046 KRCA-56046	29.20 29.40	KRC-460	26.00	.625 to 1.000 1.000 to 1.375	KPD-86046 KPD-116046	21.00 21.00
60-Ampere — Style "J," Grounded Through Shell and Extra Pole — Form 60										
2-Wire, 3-Pole	1 1¼	JRCBB-36036 JRCBB-46036	27.80 28.00	JRCA-36036 JRCA-46036	27.50 27.70	JRC-360	24.50	.625 to 1.000 1.000 to 1.250	JPD-86036 JPD-106036	21.50 21.50
3-Wire, 4-Pole	1¼ 1½	JRCBB-46046 JRCBB-56046	32.00 32.20	JRCA-46046 JRCA-56046	31.70 31.90	JRC-460	28.50	.625 to 1.000 1.000 to 1.375	JPD-86046 JPD-116046	23.50 23.50
100-Ampere — Style "K," Grounded Through Shell — Form 100										
3-Wire, 3-Pole	1¼ 1½	KRCBB-410036 KRCBB-510036	43.50 43.60	KRCA-410036 KRCA-510036	42.20 42.30	KRC-3100	28.00	1.000 to 1.375 1.375 to 1.625	KPD-1110036 KPD-1310036	30.00 30.00
4-Wire, 4-Pole	1½ 2	KRCBB-510046 KRCBB-610046	47.60 47.70	KRCA-510046 KRCA-610046	46.30 46.40	KRC-4100	32.00	1.000 to 1.375 1.375 to 1.750	KPD-1110046 KPD-1410046	34.00 34.00
100-Ampere — Style "J," Grounded Through Shell and Extra Pole — Form 100										
2-Wire, 3-Pole	1¼ 1½	JRCBB-410036 JRCBB-510036	46.50 46.60	JRCA-410036 JRCA-510036	45.20 45.30	JRC-3100	31.00	1.000 to 1.375 1.375 to 1.625	JPD-1110036 JPD-1310036	33.00 33.00
3-Wire, 4-Pole	1½ 2	JRCBB-510046 JRCBB-610046	50.60 50.70	JRCA-510046 JRCA-610046	49.30 49.40	JRC-4100	35.00	1.000 to 1.375 1.375 to 1.750	JPD-1110046 JPD-1410046	37.00 37.00

† All items listed on this page are furnished with soldered type terminals except 20-ampere rated items which are furnished with binding screw terminals.

‡ Information on other cable diameters and on plugs tapped for conduit furnished on request.

PYLE-NATIONAL QUELARC CIRCUIT BREAKING PLUGS AND RECEPTACLES

20, 30, 60 AND 100-AMPERE—250 VOLTS D.C., 600 VOLTS A.C.

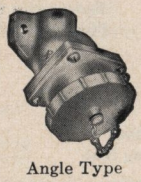
Threaded Cap Housing Type

Rustproofed Ferrous Alloy Receptacles—Aluminum Alloy Plugs—Molded Phenolic Insulation.

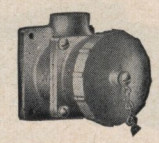
Types KREBB, JREBB, KREA and JREA Receptacles†

Style "K" Grounded Through Shell

Style "J" Grounded Through Shell and Extra Pole



Angle Type



Straight Type

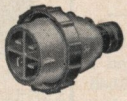
Types KRE and JRE Receptacle Housings†



Complete With Gasket

Types KPLD and JPLD Plugs†

Receptacles at Left Take Plugs of Both Cable Sizes



With Threaded Clamping Nut

For Circuits	Size	With Threaded Cap Housing: Cat. No.	List Each	With Threaded Cap Housing: Cat. No.	List Each	Threaded Cap: Cat. No.	List Each	With Rubber Bushing Cable Grip: Diameter of Cable‡	Cat. No.	List Each
20-Ampere — Style "K," Grounded Through Shell — Form 30										
2-Wire, 2-Pole	½	KREBB-12026	$13.60	KREA-12026	$13.40	KRE-220	$11.60	.250 to .625	KPLD-52026	$12.20
	¾	KREBB-22026	13.80	KREA-22026	13.60			.625 to .875	KPLD-72026	12.20
30-Ampere — Style "K," Grounded Through Shell — Form 30										
2-Wire, 2-Pole	½	KREBB-13026	15.20	KREA-13026	15.00	KRE-230	13.20	.250 to .625	KPLD-53026	13.50
	¾	KREBB-23026	15.40	KREA-23026	15.20			.625 to .875	KPLD-73026	13.50
3-Wire, 3-Pole	¾	KREBB-23036	16.40	KREA-23036	16.20	KRE-330	14.20	.250 to .625	KLPD-53036	14.80
	1	KREBB-33036	16.60	KREA-33036	16.40			.625 to 1.000	KPLD-83036	14.80
4-Wire, 4-Pole	¾	KREBB-23046	18.00	KREA-23046	17.80	KRE-430	15.80	.375 to .625	KPLD-53046	16.40
	1	KREBB-33046	18.20	KREA-33046	18.00			.625 to 1.000	KPLD-83046	16.40
30-Ampere — Style "J," Grounded Through Shell and Extra Pole — Form 30										
2-Wire, 3-Pole	¾	JREBB-23036	18.40	JREA-23036	18.20	JRE-330	16.20	.250 to .625	JPLD-53036	16.80
	1	JREBB-33036	18.60	JREA-33036	18.40			.625 to 1.000	JPLD-83036	16.80
3-Wire, 4-Pole	¾	JREBB-23046	20.00	JREA-23046	19.80	JRE-430	17.80	.375 to .625	JPLD-53046	18.40
	1	JREBB-33046	20.20	JREA-33046	20.00			.625 to 1.000	JPLD-83046	18.40
60-Ampere — Style "K," Grounded Through Shell — Form 60										
3-Wire, 3-Pole	1	KREBB-36036	25.70	KREA-36036	25.40	KRE-360	22.40	.625 to 1.000	KPLD-86036	21.00
	1¼	KREBB-46036	25.90	KREA-46036	25.60			1.000 to 1.250	KPLD-106036	21.00
4-Wire, 4-Pole	1¼	KREBB-46046	29.90	KREA-46046	29.60	KRE-460	26.40	.625 to 1.000	KPLD-86046	23.00
	1½	KREBB-56046	30.10	KREA-56046	29.80			1.000 to 1.375	KPLD-116046	23.00
60-Ampere — Style "J," Grounded Through Shell and Extra Pole — Form 60										
2-Wire, 3-Pole	1	JREBB-36036	28.20	JREA-36036	27.90	JRE-360	24.90	.625 to 1.000	JPLD-86036	23.50
	1¼	JREBB-46036	28.40	JREA-46036	28.10			1.000 to 1.250	JPLD-106036	23.50
3-Wire, 4-Pole	1¼	JREBB-46046	32.40	JREA-46046	32.10	JRE-460	28.90	.625 to 1.000	JPLD-86046	25.50
	1½	JREBB-56046	32.60	JREA-56046	32.30			1.000 to 1.375	JPLD-116046	25.50
100-Ampere — Style "K," Grounded Through Shell — Form 100										
3-Wire, 3-Pole	1¼	KREBB-410036	45.50	KREA-410036	44.20	KRE-3100	30.00	1.000 to 1.375	KPLD-1110036	33.00
	1½	KREBB-510036	45.60	KREA-510036	44.30			1.375 to 1.625	KPLD-1310036	33.00
4-Wire, 4-Pole	1½	KREBB-510046	49.60	KREA-510046	48.30	KRE-4100	34.00	1.000 to 1.375	KPLD-1110046	37.00
	2	KREBB-610046	49.70	KREA-610046	48.40			1.375 to 1.750	KPLD-1410046	37.00
100-Ampere — Style "J," Grounded Through Shell and Extra Pole — Form 100										
2-Wire, 3-Pole	1¼	JREBB-410036	48.50	JREA-410036	47.20	JRE-3100	33.00	1.000 to 1.375	JPLD-1110036	36.00
	1½	JREBB-510036	48.60	JREA-510036	47.30			1.375 to 1.625	JPLD-1310036	36.00
3-Wire, 4-Pole	1½	JREBB-510046	52.60	JREA-510046	51.30	JRE-4100	37.00	1.000 to 1.375	JPLD-1110046	40.00
	2	JREBB-610046	52.70	JREA-610046	51.40			1.375 to 1.750	JPLD-1410046	40.00

† All items listed on this page are furnished with soldered type terminals except 20-ampere rated items which are furnished with binding screw terminals.

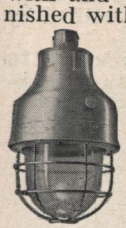
‡ Information on other cable diameters and on plugs tapped for conduit furnished on request.

DISCOUNTS: SCHEDULE "AD"

PYLE-NATIONAL LE SERIES EXPLOSION-PROOF LIGHTING FIXTURES

For Class I, Groups C and D Hazardous Locations
ALUMINUM ALLOY

Fixtures complete with globe are listed below with and without guards. They can also be furnished with porcelain enameled steel reflectors.



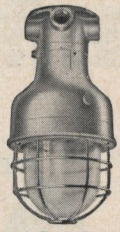
TYPE LEB PENDENT FIXTURE

For mounting on pendent stem supported from VT Series Junction Pylets with Union Hub covers. Stems longer than 12 inches require the use of a flexible fitting. Use "FO" Series Flexible Fixture Support.

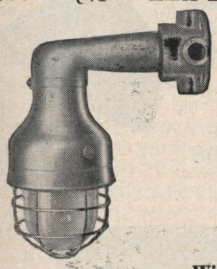
Watts	Size Inches	With Guard Cat. No.	With Guard List Each	Without Guard Cat. No.	Without Guard List Each
75	½	LEB-111	$26.00	LEB-110	$24.80
	¾	LEB-211	26.20	LEB-210	25.00
100	½	LEB-121	32.50	LEB-120	30.80
	¾	LEB-221	32.70	LEB-220	31.00
150 or 200*	½	LEB-131	32.50	LEB-130	30.80
	¾	LEB-231	32.70	LEB-230	31.00
200 or 300†	½	LEB-141	46.50	LEB-140	44.10
	¾	LEB-241	46.70	LEB-240	44.30
300 or 500	¾	LEB-251	70.00	LEB-250	65.40

TYPE LEX CEILING FIXTURE

For mounting close to ceiling. Pylet body has four threaded hubs, three of which are furnished with pipe plugs.



Watts	Size Inches	With Guard Cat. No.	With Guard List Each	Without Guard Cat. No.	Without Guard List Each
75	½	LEX-111	$33.30	LEX-110	$32.10
	¾	LEX-211	33.80	LEX-210	32.60
100	½	LEX-121	39.80	LEX-120	38.10
	¾	LEX-221	40.30	LEX-220	38.60
150 or 200*	½	LEX-131	39.80	LEX-130	38.10
	¾	LEX-231	40.30	LEX-230	38.60
200 or 300†	½	LEX-141	53.80	LEX-140	51.40
	¾	LEX-241	54.30	LEX-240	51.90
300 or 500	½	LEX-151	76.80	LEX-150	72.20
	¾	LEX-251	77.30	LEX-250	72.70



TYPE LEBX BRACKET FIXTURE

For side wall mounting. Pylet body has four threaded hubs, three of which are furnished with pipe plugs.

Watts	Size Inches	With Guard Cat. No.	With Guard List Each	Without Guard Cat. No.	Without Guard List Each
75	½	LEBX-111	$36.70	LEBX-110	$35.50
	¾	LEBX-211	37.20	LEBX-210	36.00
100	½	LEBX-121	43.20	LEBX-120	41.50
	¾	LEBX-221	43.70	LEBX-220	42.00
150 or 200*	½	LEBX-131	43.20	LEBX-130	41.50
	¾	LEBX-231	43.70	LEBX-230	42.00
200 or 300†	½	LEBX-141*	57.20	LEBX-140*	54.80
	¾	LEBX-241*	57.70	LEBX-240*	55.30
300 or 500	½	LEBX-151	80.70	LEBX-150	76.10
	¾	LEBX-251	81.20	LEBX-250	76.60

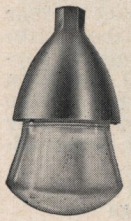
†300-Watt type PS30 lamp only.
*200-Watt type A-25 lamp.
*200, 300 or 500-Watt LEBX Fixtures take only deep bowl and 30° angle reflectors.

PYLE-NATIONAL DE SERIES LIGHTING FIXTURES

Dust-Tight, Vapor-Tight and Weather Resistant (Raintight)

Class II, Groups E, F and G, and Class III

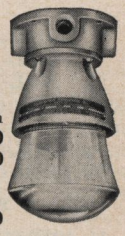
ALUMINUM ALLOY—COMPLETE WITH GLOBE



PENDENT TYPE

Size	For 100 and 150-Watt Lamps Cat. No.	List Each	For 150 and 200-Watt Lamps Cat. No.	List Each
½	DEB-120	$15.50	DEB-140	$19.00
¾	DEB-220	15.50	DEB-240	19.00

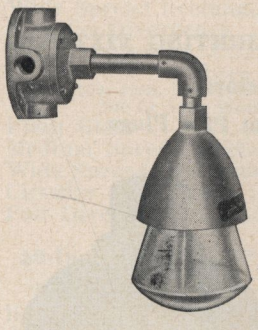
CEILING TYPE
With Type VJDX Pylets
4 Hubs, 3 Plugged



Size	For 100 and 150 Watt Lamps Cat. No.	List Each	For 150 and 200 Watt Lamps Cat. No.	List Each
½	DEXX-120	$20.00	DEXX-140	$23.50
¾	DEXX-220	20.40	DEXX-240	23.90

Without Type VJDX Pylet Body

....	DEX-120	15.50	DEX-240	19.00



BRACKET TYPE
With Type VJDX Pylet
4 Hubs—3 Plugged

Cat. No.	Size	Lamp Watts	List Each
DEBXX-			
120	½	100–150	$27.50
220	¾	100–150	27.90
140	½	150–200	31.00
240	¾	150–200	31.40

Without Type VJDX Pylet

Cat. No.	Size	Lamp Watts	List Each
DEBX-			
220	....	100–150	23.00
240	....	150–200	26.50

REFLECTORS FOR DE SERIES LIGHTING FIXTURES

Porcelain Enameled Steel—Green Outside White Inside



Dome Type



Shallow Type



30° Angle

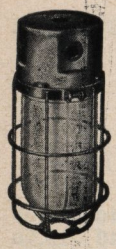
Cat. No.	Size In.	List Each	Cat. No.	Size In.	List Each	Cat. No.	Size In.	List Each
For 100-150-Watt Fixtures								
DE-22	12	$4.70	DE-23	12	$4.20	DE-25	12	$5.00
For 150 or 200-Watt Fixtures								
DE-42	18	7.00	DE-43	16	6.10	DE-45	14	6.00

DISCOUNTS: SCHEDULE "AD"

PYLE-NATIONAL VAPOR-TIGHT INDUSTRIAL LIGHTING PYLETS

5-HUB TYPE WITHOUT PIPE PLUGS

Rustproofed Ferrous Alloy Bodies, Clamp Type Guards



The universal construction of these Pylets permit their application in many kinds of installations using a minimum number of stock items.

Five hub bodies are tapped in four sides and top and are furnished without plugs. All types are regularly furnished with Type FSL-100 porcelain receptacle with lamp grip but can be furnished with Type FSL-2 Phenolic receptacle with lamp grip at an advance in list price.

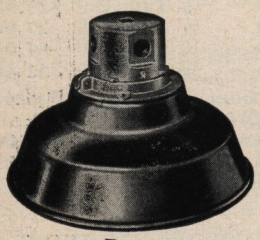
Five Hubs—Without Pipe Plugs

Size Inches	With Globe and Guard Cat. No.	List Each	Without Globe and Guard Cat. No.	List Each
Form 15—50 to 60-Watt Lamps				
½	BOL-1501	$9.55	BOC-1501	$4.35
¾	BOL-1502	9.80	BOC-1502	4.60
Form 75—75 to 100-Watt Lamps				
½	BOL-7501	9.55	BOC-1501	4.35
¾	BOL-7502	9.80	BOC-1502	4.60
Form 200—150 to 200-Watt Lamps				
½	BOL-20001	11.25	BOC-20001	5.15
¾	BOL-20002	11.50	BOC-20002	5.40

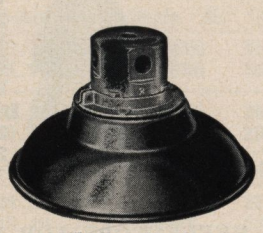
VAPOR-TIGHT UTILITY LIGHTING FIXTURES

With Reflectors

Five Hubs—Without Pipe Plugs



Dome



Shallow Bowl

Type Reflector	Size ½ Inch Cat. No.	List Each	Size ¾ Inch Cat. No.	List Each
Form 75—50, 60, 75 or 100 Watt Lamp				
Dome	BOE-1720	$12.45	BOE-2720	$12.70
Shallow	BOE-1710	11.45	BOE-2710	11.70
45° Angle	BOE-1740	10.95	BOE-2740	11.20
Form 200—150 Watt Lamp				
Dome	BOE-1221	14.55	BOE-2221	14.80
Shallow Bowl	BOE-1211	13.55	BOE-2211	13.80
Deep Bowl	BOE-1232	14.55	BOE-2232	14.80
45° Angle	BOE-1242	15.05	BOE-2242	15.30
Form 200—200 Watt Lamp				
Dome	BOE-1222	15.55	BOE-2222	15.80
Shallow Bowl	BOE-1212	14.55	BOE-2212	14.80
Deep Bowl	BOE-1232	14.55	BOE-2232	14.80
45° Angle	BOE-1242	15.05	BOE-2242	15.30

PYLE-NATIONAL VAPOR-TIGHT INDUSTRIAL LIGHTING PYLETS

Cooled by convection air currents through slot between reflector and body.

Cast aluminum bodies; mogul porcelain receptacle.

For 300 watt medium screw base lamp an adapter is furnished at no extra charge — specified by suffix "A". Example: BOB-150-A.

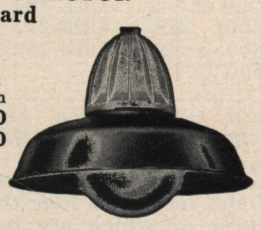
For fixtures with heat resistant globes add **$8.10** list. Specified by suffix "H" — example: BOB-150-H.

300 OR 500 WATT WITHOUT GUARD AND REFLECTOR



Style	Size Inches	Cat. No.	List Each
Plain	½	BOB-150	$10.70
Globe	¾	BOB-250	10.70

WITH DOME REFLECTOR Less Guard



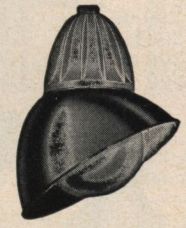
Style	Size Inches	Cat. No.	List Each
Plain	½	BOB-152	$18.90
Globe	¾	BOB-252	18.90

WITH DEEP BOWL REFLECTOR Less Guard



Style	Size Inches	Cat. No.	List Each
Plain	½	BOB-153	$16.00
Globe	¾	BOB-253	16.00

WITH 30° ANGLE REFLECTOR Less Guard



Style	Size Inches	Cat. No.	List Each
Plain	½	BOB-154	$18.00
Globe	¾	BOB-254	18.00

WIRE GUARDS



Globe Guard*



Basket Guard

Cat. No.	List Each	Reflector Size	Cat. No.	List Each
BO-173	$7.50	12" Dia. (Deep)	BO-172	$3.65
		14" Dia. (Angle)	BO-171	4.20
		18" Dia. (Dome)	BO-170	5.30

*For fixtures without reflectors only.



GLOBES

Type	Cat. No.	List Each
Plain	BO-164	$3.30
Heat Resistant	BO-164-H	11.40

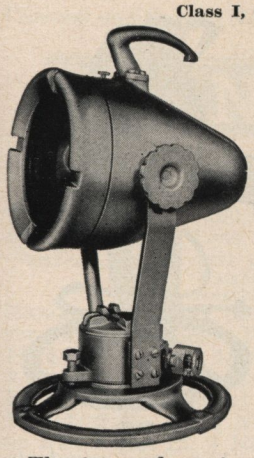
DISCOUNTS: SCHEDULE "AD"

PYLE-NATIONAL FLOODLIGHTING PROJECTORS

TYPE FEA FLOODLIGHTS

Explosion-Proof and Weather-Resistant (Raintight)

Class I, Groups C and D



Type FEA Floodlights are used particularly for aircraft maintenance, refueling operations, and for emergency lighting at refineries, distillation plants, etc. Also, may be used in any location where ruggedness and weather resistance is a requirement. They are of lightweight aluminum construction and are easy to handle in portable use. Body adjustment is 360° horizontal and 270° vertical movement. Rating: 150 watts and 300 watts.

The front glass ring screws into the body and is provided with lugs at four points to facilitate removal for lamping. The plain, heat resistant front glass is clamped into position by means of an internal ring.

150 Watt

Cat. No.	Base	Lamp* (Spot or Flood)	List Each
FEA-1912	Med. Side Prong	Par-38 Proj.	$145.00
FEA-1012	Med. Skirted Sc.	Par-38 Proj.	145.00
	Med. Screw	R-40 Refl.	

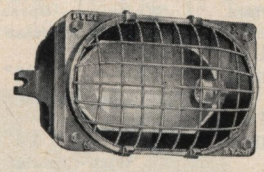
300 Watt (Spot)

FEA-1112	Mogul	R-40 Refl. Plain Lens	On
FEA-1122	Screw	R-40 Refl. Diff. Lens	Request

* Not furnished with floodlight.

PYLE-NATIONAL VAPOR-TIGHT PIT AND SUBWAY LIGHTS

For Flush or Surface Wall or Ceiling Mounting



Provide perfect lighting for pits, tunnels, under-passes, subways, wash-racks, etc.

Use Specular Alzak type when vertical adjustment is desired — adjusts 18° up or down. Plain, heat and impact resisting front glass, with smooth, flat surfaces on both sides, assures highest beam output through reduction of reflection losses and also permits easy cleaning. Reversible hinged wire guard, when specified, provides extra protection for front glass.

Types listed below have a ½-inch conduit hub at each end, but can be tapped ¾", 1" or 1¼", when specified, at no extra charge. Blank hub on back can also be tapped up to 1¼" when specified.

Body is cast aluminum, natural finish and cover is ferrous alloy, cadmium plated.

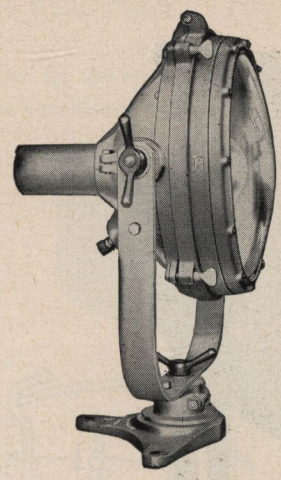
Lamps used are 100-watt A-21, 150-watt A-23 or 200-watt A-25.

Plain Heat and Impact Resisting Front Glass

With/Without Wire Guard	With Adjustable Specular Alzak Reflector — Cat. No.	List Each	With White Porcelain Enamel Reflector — Cat. No.	List Each
With Guard	12N1211–1	$54.00	12N1611—1	$49.00
Without	12N1211	51.00	12N1611	46.00

PYLE-NATIONAL FLOODLIGHTING PROJECTORS

CAST ALUMINUM — WITH STANDARD BASE



Coast Guard approved types also available

Door and door glass joints are tightly sealed against the admission of dust and moisture. Housing and front door are heavy cast aluminum; necessary parts of cast iron are galvanized. A wiring splice chamber is cast integral with the housing to which is attached a watertight strain relief bushing. Angle degree markings for both vertical and horizontal body adjustments are provided. A locking device permanently sets the adjustments.

14-Inch Type 14180*

For 300 to 500 Watt Incandescent and 400 Watt Mercury Vapor Lamps

Type of Door Glass	With Specular Alzak Reflector†	List Each
Plain Glass	14A1211	$136.00
Medium Spread Rectangular	14A1221	136.00
Wide Spread Rectangular	14A1201–22	136.00
Circular Divergence	14A1231	136.00
Fan Divergence	14A1241	136.00

16-Inch Type 16180*

For 750 to 1000 Watt Incandescent and 400 Watt Mercury Vapor Lamps

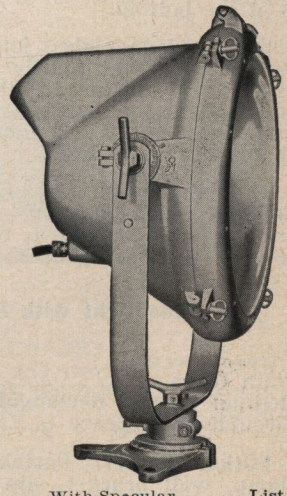
Plain Glass	16A1211	$170.00
Medium Spread Rectangular	16A1221	170.00
Wide Spread Rectangular	16A1201–22	170.00
Circular Divergence	16A1231	170.00
Fan Divergence	16A1241	170.00

18-Inch Type 18190*

For 750, 1000, and 1500 Watt Incandescent Lamps and 700 or 1000 Watt Mercury Vapor Lamps

Plain Glass	18D1211	$280.00
Medium Spread Rectangular	18D1221	280.00
Wide Spread Rectangular	18D1201–22	280.00
Circular Divergence	18D1231	280.00
Fan Divergence	18D1241	280.00

20-Inch Type 20175*



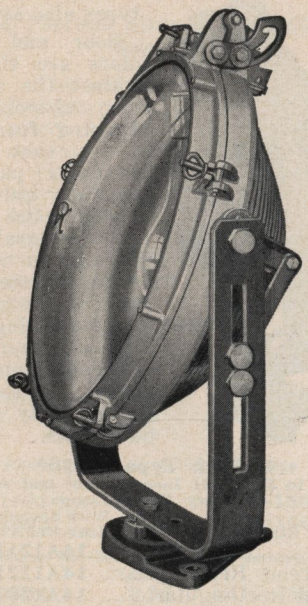
The Type 20175 floodlight projector has been designed to take a 750-watt, 1000-watt or a 1500-watt incandescent lamp or a 700-watt or a 1000-watt mercury vapor lamp. A most substantial dust and moisture proof construction is used throughout; housing is of heavy cast aluminum. The reflector projects a smooth even beam of light and maintains its initial high efficiency throughout a long period of service.

Type of Door Glass	With Specular Alzak Reflector‡	List Each
Plain Glass	20L1211	$280.00
Medium Spread Rectangular	20L1221	280.00
Circular Divergence	20L1231	280.00
Fan Divergence	20L1241	280.00
Wide Spread Rectangular	20L1201–22	280.00

*See foot notes in following column.

PYLE-NATIONAL FLOODLIGHTING PROJECTORS

23-INCH CAST ALUMINUM FLOODLIGHTS



The Type 2375 floodlight projector is a most efficient unit for use with 1000 to 2000-watt incandescent or 700 and 1000 watt mercury vapor lamps. The reflector curves and lenses for use with this projector have been specially developed to give the best possible projection of light from these large lamps.

A rustproof construction has been employed throughout. The body is dust and moistureproof. This unit is designed to take both "PS" and "G" type incandescent and "BT" mercury vapor bulbs. When a "PS" or "BT" bulb is used, the body of the projector should be turned so that the lamp receptacle is at the top. When a "G" type blub is used, a lamp extension must be inserted and the body of the projector turned so that the lamp receptacle is at the bottom.

Door and door glass joints are provided with a soft packing that tightly seals against admission of dust and moisture. Both vertical and horizontal adjustments are provided with a locking device that permanently sets the adjustments against all chances of disturbance.

The catalog numbers given below are for floodlights in which type "PS" or "BT" lamps are to be used. If type G lamp is to be used, add numeral 26 after the catalog number.

Floodlight with Standard Base*

Type of Door Glass	With Specular Alzak Reflector†	Price Each
Plain Glass	23A1211	$380.00
Medium Spread Rectangular	23A1221	380.00
Circular Divergence	23A1231	380.00

***Other Bases:** Portable, pedestal, mounting clamp, wall bracket, slip fit mounting, threaded pipe mounting, angle iron, pole bracket and "U" bolt bases can be furnished, if required.

†Floodlight with diffusing Alzak or glass reflector also available. Prices on request.

‡Diffusing Alzak reflector also available.

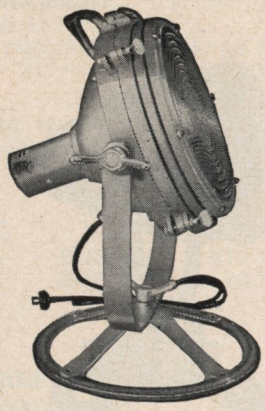
PYLE-NATIONAL PORTABLE FLOODLIGHTS

FOR EMERGENCY USE

Invaluable aid in fighting fires, rescue work, property protection and wherever emergency lighting is required.



10-Inch



14-Inch

Floodlights with portable base are regularly furnished with a cast brass carrying handle. A large round base is supplied to permit placing the floodlights on any flat surface. The base has four holes for mounting on fire truck.

Portable floodlights are furnished with a 10-ft., 2-conductor cord and a standard 2-pole attachment plug. They can also be furnished with a 2-pole Hubbell Twist-lock plug and rubber cover at an advance in list price. Twist-lock plugs are specified by adding the digits "68" after the catalog number. Example: Cat. No. 10-R-1232-51 becomes 10-R-1232-51-68.

Portable floodlights are furnished with baked aluminum finish throughout or with chrome plated handle, wing nut screws, etc., as listed below.

Lamps to be used: 250-watt, G-30; 500-watt, PS-40 or G-40 bulb.

With Aluminum Finished Handle, Nuts, Etc.

Diam.	Watts	Beam Spread	With Alzak Reflector†	List Each
		With Circular Divergence Lens		
10-inch	250	54°	10R1232	$90.00
		With Clear Lens		
10-inch	250	13°	10R1212	90.00
		With Circular Divergence Lens		
14-inch	500	49°	14A1232	142.00
	500	41°		
		With Clear Lens		
14-inch	500	22°	14A1212	142.00
	500	12°		

With Chrome Finished Handle, Nuts, Etc.

		With Circular Divergence Lens		
10-inch	250	54°	10R1232-51	97.00
		With Clear Lens		
10-inch	250	13°	10R1212-51	97.00
		With Circular Divergence Lens		
14-inch	500	49°	14A1232-51	155.00
	500	41°		
		With Clear Lens		
14-inch	500	22°	14A1212-51	155.00
	500	12°		

†Floodlight with glass reflector also available. Prices on request.

DISCOUNTS: SCHEDULE "FD"

P-5566-P

WIREMOLD RACEWAYS—200-1900

Standard Wiremold Finish on all sizes except No. 1500 and No. 2600 which are galvanized, and No. 2100 and No. 3000 which are furnished in Standard Wiremold and in White Finish.

For White Finish see Fluorescent Price List FL-11.

Note: Quantity price for each size is determined by the combined footage of all sizes

Channel and Cover (Nos. 1900, 2000, 2100, and 3000) may be considered separate items when combining footages

No. 200



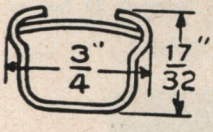
	Per 100 ft.
2500 feet and over	$8.70
1000 feet and over	9.60
100 feet and over	10.60
Less than 100 feet	11.70
List price	14.50

Weight per 100 feet—15 pounds (5 ft. lengths) 100 feet to carton.

Maximum Capacity (Recommended only for straight runs with no bends): Type R or RH: 2 No. 12; 3 No. 14; 4 No. 16; 4 No. 18. Type T, TW, or RU: 3 No. 12; 3 No. 14; 6 No. 16; 8 No. 18.

Recommended Normal Capacity: Type R or RH: 2 No. 12; 2 No. 14; 4 No. 16; 4 No. 18. Type T, TW, or RU: 3 No. 12; 3 No. 14; 4 No. 16; 4 No. 18.

No. 500



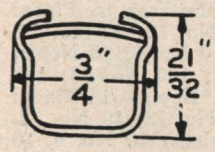
	Per 100 ft.
2500 feet and over	$10.50
1000 feet and over	11.60
100 feet and over	12.80
Less than 100 feet	14.10
List price	17.50

Weight per 100 feet—32 pounds (10 ft. lengths) 100 feet to carton.

Maximum Capacity (Recommended only for straight runs with no bends): Type R or RH: 2 No. 10; 4 No. 12; 5 No. 14; 6 No. 16; 6 No. 18. Type T, TW, or RU: 2 No. 8; 4 No. 10; 6 No. 12; 6 No. 14; 10 No. 16; 10 No. 18.

Recommended Normal Capacity: Type R or RH: 2 No. 10; 2 No. 12; 3 No. 14; 6 No. 16; 6 No. 18. Type T, TW, or RU: 2 No. 8; 3 No. 10; 4 No. 12; 5 No. 14; 10 No. 16; 10 No. 18.

No. 700



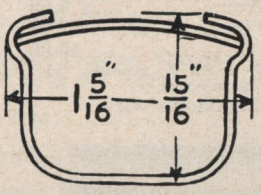
	Per 100 ft.
2500 feet and over	$11.80
1000 feet and over	13.00
100 feet and over	14.30
Less than 100 feet	15.80
List price	19.70

Weight per 100 feet—36 pounds (10 ft. lengths) 100 feet to carton.

Maximum Capacity (Recommended only for straight runs with no bends): Type R or RH: 2 No. 8; 3 No. 10; 6 No. 12; 7 No. 14; 10 No. 16; 10 No. 18. Type T, TW, or RU: 3 No. 8; 6 No. 10; 8 No. 12; 8 No. 14; 16 No. 16; 18 No. 18.

Recommended Normal Capacity: Type R or RH: 2 No. 10; 3 No. 12; 4 No. 14; 10 No. 16; 10 No. 18. Type T, TW, or RU: 3 No. 8; 5 No. 10; 6 No. 12; 8 No. 14; 16 No. 16; 18 No. 18.

No. 1000

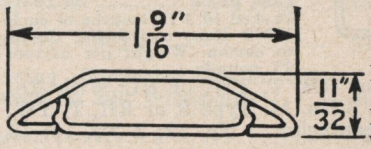


	Per 100 ft.
100 feet and over	$24.60
Less than 100 feet	27.10
List price	41.00

Weight per 100 feet — 62 pounds (10 ft. lengths) 100 feet to carton.

Capacity: Type R or RH: 4 No. 6; 5 No. 8; 6 No. 10; 10 No. 12; 10 No. 14; 24 No. 16; 24 No. 18. Type T, TW, or RU: 5 No. 6; 8 No. 8; 8 No. 10; 10 No. 12; 10 No. 14; 40 No. 16; 50 No. 18.

No. 1500

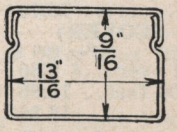


	Per 100 ft.
100 feet and over	$20.80
Less than 100 feet	22.90
List Price	34.70

Weight per 100 ft.—47 lbs. (10 ft. lengths) 100 ft. to ctn. Also furnished in 5 ft. lengths, 50 ft. to ctn.

Capacity: Type R or RH: 4 No. 12; 4 No. 14; 6 No. 16; 8 No. 18. Type T, TW, or RU: 4 No. 8; 4 No. 10; 6 No. 12; 8 No. 14; 10 No. 16; 14 No. 18. Twisted Pair: 3 No. 16; 4 No. 18; 5 No. 22. Telephone Type JKT Wire; 6 No. JKT-2; 6 No. JKT-3; 5 No. JKT-4.

No. 1900



1900B (CHANNEL)	Per 100 ft.
100 feet and over	$ 8.00
Less than 100 feet	8.80
List price	13.30
1900C (COVER)	**Per 100 ft.**
100 feet and over	$5.80
Less than 100 feet	6.40
List price	9.70

Weight per 100 feet—Channel, (10 ft. lengths) 18 pounds; Cover (5 ft. lengths) 11 pounds; each 100 feet to carton. Five-foot lengths of 1900B available at no extra cost, but 10 foot-lengths furnished unless otherwise specified.

Capacity: Type R, RH, T, TW, or RU With Receptacles: 3 No. 12; 3 No. 14. Type R, RH, T, TW, or RU Without Receptacles: 3 No. 12; 3 No. 14; 10 No. 16; 10 No. 18.

All items on this page are listed by Underwriters' Laboratories, Inc.

See Wiremold Wiring Guide for complete descriptive information and installation instructions

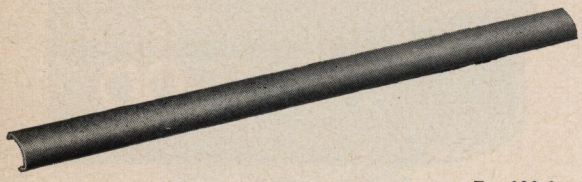
WIREMOLD RACEWAYS—1900T-3000

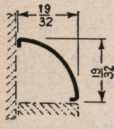
Standard Wiremold Finish on all sizes except No. 1500 and No. 2600 which are galvanized, and No. 2100 and No. 3000 which are furnished in Standard Wiremold and in White Finish.

For White Finish, see Fluorescent Price List FL-10.

Note: Quantity price for each size is determined by the combined footage of all sizes

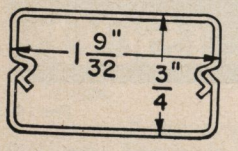
Channel and Cover (Nos. 1900, 2000, 2100, and 3000) may be considered separate items when combining footages





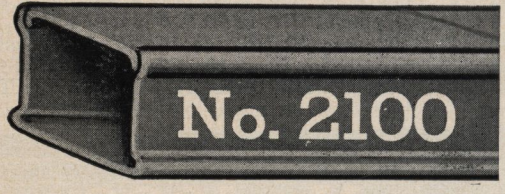
Per 100 ft.
100 feet and over.....$ 6.50
Less than 100 feet..... 7.20
List price 10.80
Weight per 100 feet—9 pounds (5 ft. lengths) 100 feet to carton.
Capacity: 5 pair telephone wire.

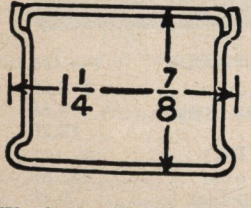




Blank Fill-in Cover & Base
Per 100 ft.
50 feet and over..$20.80
Less than 50 feet. 22.90
List price 34.70
Packed 10 5 ft. lengths of each 2000B Base and 2000C Cover to carton. Weight per carton, 25 pounds.

Capacity: Type R or RH, T, TW, or RU With Receptacles: 3 No. 12; 3 No. 14. Type R or RH, T, TW, or RU Without Receptacles: 3 No. 12; 3 No. 14; 10 No. 16; 10 No. 18.



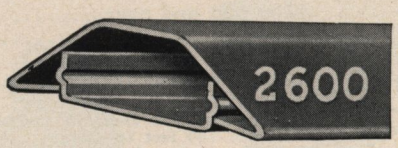


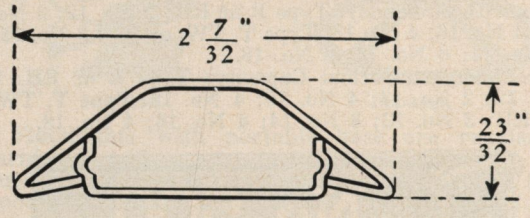
2100B (CHANNEL)
Per 100 ft.
100 feet and over...$14.20
Less than 100 feet.. 15.60
List price 23.70

2100C (COVER)
Per 100 ft.
100 feet and over...$ 9.80
Less than 100 feet.. 10.80
List price 16.30

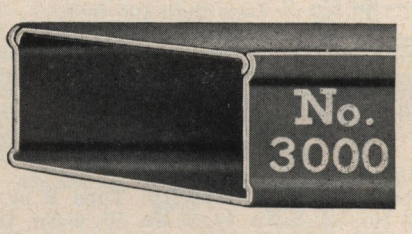
Weight per 100 feet (10 ft. lengths) Channel, 43 pounds; Cover (5 ft. lengths), 19 pounds. Each 100 feet to carton.
Capacity: Type R or RH, T, TW, or RU With Receptacles: See individual listings of devices in catalog. Type R or RH Without Receptacles: 4 No. 6; 6 No. 8; 10 No. 10; 10 No. 12; 10 No. 14; 24 No. 16; 24 No. 18. Type T, TW, or RU Without Receptacles: 5 No. 6; 8 No. 8; 10 No. 10; 10 No. 12; 10 No. 14; 40 No. 16; 50 No. 18.

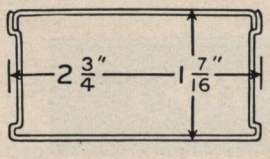
No. 220 — For data on the PLUGMOLD ELECTRIFIED BASEBOARD, see following pages.





50 feet and over.....$32.10 per 100 ft.
Less than 50 feet..... 35.30 per 100 ft.
List price ..... 53.50 per 100 ft.
Weight per 50 feet—44 pounds (10 ft. lengths) 50 feet to carton. Also furnished in 5 ft. lengths, 25 feet to carton.
Capacity: Two 26-pair telephone cables.*





COVER and BASE Per 100 ft.
50 feet and over ..$41.30
Less than 50 feet .. 45.40
List price 68.80
Packed 5 10 ft. lengths of each 3000B Base and 3000C Cover to carton. Weight per carton, 65 pounds.
3000B and 3000C hole cut to take standard sockets. Price on application.

Capacity: Type R or RH With *Devices in Place: 6 No. 6; 8 No. 8; 10 No. 10; 10 No. 12; 10 No. 14. Type R or RH Without Devices: 10 No. 6; 10 No. 8; 10 No. 10; 10 No. 12; 10 No. 14; 100 No. 16; 100 No. 18. Type T, TW, or RU With *Devices in Place: 8 No. 6 10 No. 8; 10 No. 10; 10 No. 12; 10 No. 14. Type T, TW, or RU Without Devices: 10 No. 6, 10 No. 8; 10 No. 10; 10 No. 12; 10 No. 14; 100 No. 16; 100 No. 18.

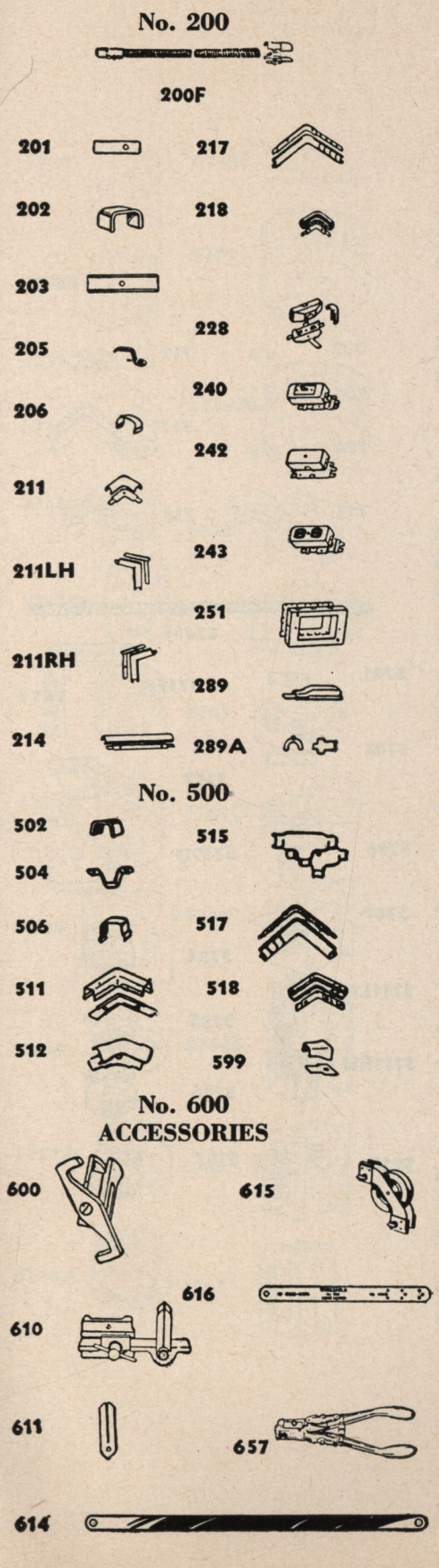
*With standard flush-mounted snap switches and attachment plug receptacles of type not having pilot lights.

NOTE

TOLERANCE: 5 ft. or 10 ft. lengths, plus ¼" minus ⅛"
Flexible section available in any length. Price on application.

All items on this page except * are listed by Underwriters' Laboratories, Inc.

See Wiremold Wiring Guide for complete descriptive information and installation instructions



WIREMOLD FITTINGS

Cat. No.	Fitting	List Per 100 Pieces	Unit Pkge. Quantity	Std. Pkge. Quantity	Wgt. Lbs.
200F	Flexible Section, 18" long	$203.10	1	10	3½
201	Coupling	2.80	10	100	¾
202	Bushing	1.90	50	200	½
203	Supporting Clip	3.50	50	200	1¾
205	One Hole Strap	1.90	50	200	1
206	Connection Cover	4.00	50	200	⅝
211	90° Flat Elbow	29.80	5	50	2⅛
211LH	Internal Twisted Elbow (for 90° twist with 90° turn)	45.30	5	20	1½
211RH	Internal Twisted Elbow (for 90° twist with 90° turn)	45.30	5	20	1½
214	Pull Box	36.40	5	20	1½
217	Internal Elbow (1 scored leg)	46.00	5	50	5
218	External Elbow	31.90	5	50	2
228	Adjustable Junction Box	85.10	5	20	2⅛
240	Single Pole Switch with Box 10A125V, 5A250V	188.80	1	40	11
240B	3-way Switch with Box	230.35	1	40	11
242	Utility Box	95.20	1	20	3¾
243	Duplex Receptacle, 15A125V, 10A250V	111.60	1	40	8½
251	Extension Adapter	88.20	1	20	6¼
289	Reducing Connector (from 500 Twistout to 200 Wiremold)	30.40	5	20	¾
289A	Adapter	5.10	10	40	½

Use No. 500 Elbows with No. 500 Wiremold raceway. They cost less and make a neater job.

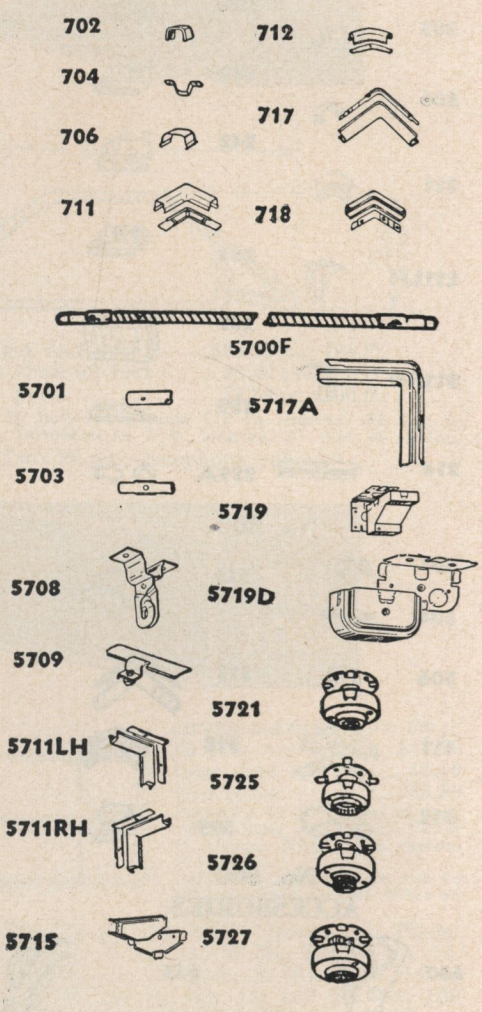
502	Bushing	2.40	50	200	½
504	One or Two Hole Strap	2.50	50	500	7½
506	Connection Cover	2.50	50	200	1¾
511	90° Flat Elbow	26.00	5	100	14½
512	45° Flat Elbow	41.60	5	20	1½
517	Internal Elbow (1 scored leg)	34.40	5	100	18½
518	External Elbow (1 scored leg)	26.70	5	100	13½
599	Connector (For Metal Moulding Boxes)	25.40	5	20	½
600	Bender (For Nos. 200-500-700)	6.50 ea.		1	2½
610	Miter Box	10.30 ea.		1	3¾
611	Miter Box Guide Finger	86.40	2	8	1
614	Hacksaw Blade	37.10	10	100	4¼
614A	High Speed Hacksaw Blade	125.10	10	100	4¼
615	Wire Pulley	3.20 ea.		1	3
616	Snake Leader	16.70	10	100	1¾
657	Canopy Cutter	40.40 ea.		1	4
WE	Wiremold Enamel, 1 pt. can	145.20		1	1¼

All items on this page listed by Underwriters' Laboratories, Inc. See Wiremold Wiring Guide for complete descriptive information installation instructions.

WIREMOLD FITTINGS

Fittings having catalog numbers beginning with 57 are for use with No. 500 and No. 700 WIREMOLD raceway.

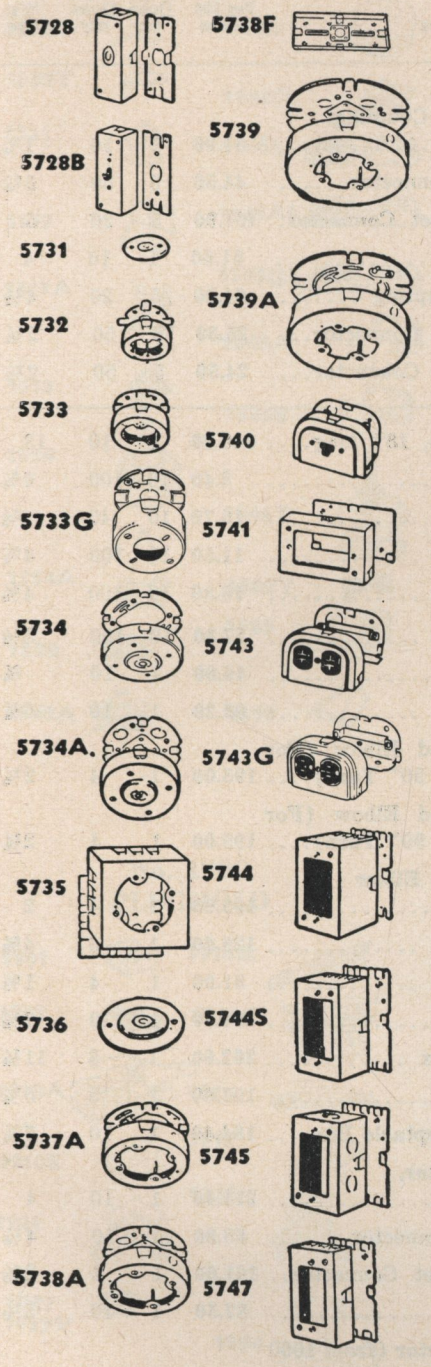
Cat. No.	Fitting	List Per 100 Pieces	Unit Pkge. Quantity	Std. Pkge. Quantity	Wgt. Lbs.
	NO. 700				
702	Bushing	2.60	50	200	¾
704	One or Two Hole Strap	3.70	50	200	4¼
706	Connection Cover	3.80	50	200	2
711	90° Flat Elbow	28.00	5	100	15¾
712	45° Flat Elbow	45.70	5	20	1¾
717	Internal Elbow	36.90	5	100	20½
718	External Elbow (1 scored leg)	28.20	5	100	16
	NO. 5700				
5700F	Flexible Section 18" Long	$269.90	1	10	5¾
5701	Coupling	3.00	50	200	3
5703	Supporting Clip	4.90	50	500	12¼
5708	Fixture Hook	45.00	5	20	1½
5709	Ground Clamp	48.80	5	20	¾
5711LH	Internal Twisted Elbow (For 90° Twist with 90° Turn)	64.10	5	50	9¼
5711RH	Internal Twisted Elbow (For 90° Twist with 90° Turn)	64.10	5	50	9¼
5715	Tee	58.80	1	20	5¼
5717A	Internal Pull Elbow	112.10	1	10	4⅝
5719**	Corner Box	98.90	5	20	8
5719D	Corner Box	74.30	1	20	7¾
5721	Utility Box	81.70	5	40	11
5725	Receptacle Base, 660W250V	171.20	5	20	7
5726	Keyless Receptacle, 660W250V	186.70	5	20	7¾
5727	Plug Receptacle 15A125V, 10A250V	186.00	5	40	13⅛
5728	Utility Box	91.50	1	20	6½
5728B	Single Pole Switch with Box, 10A125V, 5A250V	220.50	1	10	4½
5731	Blank Cover	27.20	5	50	3¾
5732	Outlet Box	96.70	5	20	4½
5733	Outlet Box	93.80	5	20	5
5733G	Outlet Box	114.30	1	10	3¼
5734	Blank Extension Box	123.10	1	20	11¼
5734A	Utility Box	119.60	1	20	12½
5735	Distribution Box	165.20	1	20	15½
5736	Blank Cover	35.30	5	100	18
5737A	Extension Box	134.30	1	60	41½
5738A	Fixture Box	113.60	1	60	45½
5738F	Grounding Box for Fluorescent Fixtures	72.00	5	20	9¾



All items on this page except* are listed by Underwriters' Laboratories, Inc.

See Wiremold Wiring Guide for complete descriptive information and installation instructions.

** In place of this fitting we recommend the use of 5719D



WIREMOLD FITTINGS

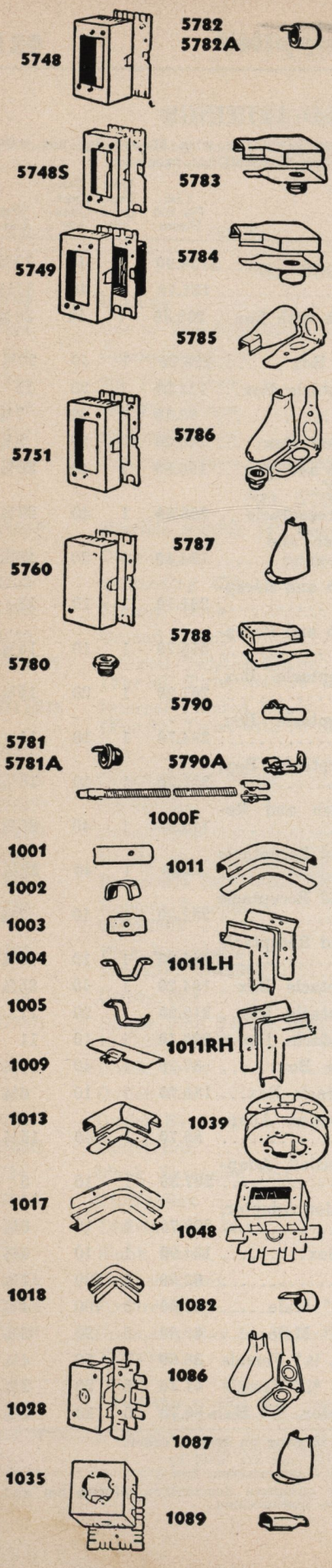
Fittings having catalog numbers beginning with 57 are for use with No. 500 and No. 700 WIREMOLD raceway.

Cat. No.	Fitting	List Per 100 Pieces	Unit Pkge. Quantity	Std. Pkge. Quantity	Wgt. Lbs.
5739	Fixture Box	$138.90	1	40	39¾
5739A	Extension Box	151.70	1	40	37½
5740	Single Pole Switch with Box.. 10A125V, 5A250V	209.40	1	40	20¾
5740B	3-way Switch and Box	226.20	1	40	20¾
5741	Switch and Receptacle Box...	122.20	1	20	11
5742	Junction Box	95.10	1	20	7½
5742A	Adjustable Junction Box.....	146.20	5	20	8¾
5743	Duplex Receptacle and Box... 15A125V, 10A250V	166.80	1	40	20½
5743G	Grounded duplex receptacle ..	298.50	1	40	20½
5744	Extra Deep Switch and Receptacle Box, 1-gang	194.10	1	20	18¾
5744-2	Extra Deep Switch and Receptacle Box, 2-gang	281.10	1	10	13
5744-3	Extra Deep Switch and Receptacle Box, 3-gang	355.70	1	10	15¼
†5744S	Switch and Receptacle Box, 1-gang	207.20	1	20	15¾
†5744S-2	Switch and Receptacle Box, 2-gang	284.70	1	10	11
†5744S-3	Switch and Receptacle Box, 3-gang	381.20	1	10	13½
5745	Combination Switch and Receptacle Box	113.80	1	40	25¾
5747	Shallow Switch and Receptacle Box	95.80	1	40	22½
5747-2	Shallow Switch and Receptacle Box	202.30	1	10	7½
5747-3	Shallow Switch and Receptacle Box	246.20	1	10	10¼
5748	Switch and Receptacle Box..	104.20	1	40	25¾
5748-2	Switch and Receptacle Box..	210.90	1	20	17
5748-3	Switch and Receptacle Box..	260.40	1	10	11
5748S	Shallow Receptacle Box.....	87.70	1	40	17¼
5749	Switch and Receptacle Box...	180.70	1	10	6¼
5751	Flush Type Extension Adapter, 1-gang	89.70	1	40	15¼
5752	Flush Type Extension Adapter, 2-gang	207.30	1	10	5
5753	Flush Type Extension Adapter, 3-gang	270.70	1	10	6½
5760	Blank Extension Box.....	104.90	1	10	4½
5780	Special Nipple	63.90	5	20	1¼
5781	Box Connector, ½" Male.....	32.00	5	100	4¾
5781A	Box Connector, ¾" Male.....	69.00	5	20	2⅛
5782	Conduit Connector, ½" Female	38.60	5	50	4¼
5782A	Conduit Connector, ¾" Female	61.40	5	20	2¾
5783	Elbow Box Connector, ½" Male	80.70	5	20	2½

†Furnished up to 12-gang on special order.

All items on this page are listed by **Underwriters' Laboratories, Inc.**

See Wiremold Wiring Guide for complete descriptive information and installation instructions.



WIREMOLD FITTINGS

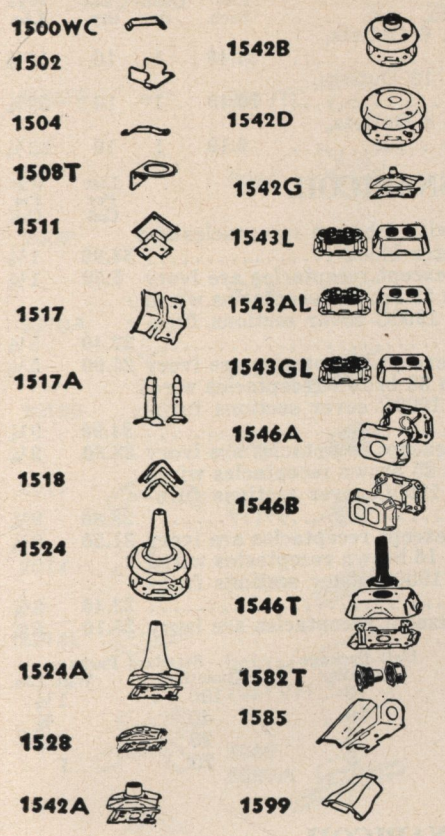
Fittings having catalog numbers beginning with 57 are for use with No. 500 and No. 700 Wiremold raceway

Cat. No.	Fitting	List Per 100 Pieces	Unit Pkge. Quantity	Std. Pkge. Quantity	Wgt. Lbs.
5784	Elbow Conduit Coupling, ½" Female	$ 81.90	1	10	1¾
5785	Combination Connector	44.50	5	50	6¼
5786	Adjustable Offset Connector.	101.90	5	20	5
5787	Kick Plate	81.60	1	10	4
5788	Open Work Coupling	64.00	5	20	4½
5790	Armored Cable Connector...	25.30	5	50	2¼
5790A	Armored Cable Connector...	24.50	5	50	2½
1000F	Flexible Section, 18" long....	348.20	1	10	13
1001	Coupling	8.40	10	100	6¾
1002	Bushing	15.70	10	40	½
1003	Supporting Clip	11.50	10	100	4¾
1004	Two Hole Strap	16.80	10	100	4⅝
1005	One Hole Strap	17.30	10	100	3½
1009	Ground Clamp	46.00	1	10	¾
1011	90° Flat Elbow	93.20	1	10	6¼
1011LH	Internal Twisted Elbow (For 90° Twist with 90° Turn)....	195.00	1	4	2¼
1011RH	Internal Twisted Elbow (For 90° Twist with 90° Turn)....	195.00	1	4	2¼
1013	Adjustable Flat Elbow (56° to 128°)	109.90	1	4	2
1017	Internal Elbow	128.60	1	6	4⅝
1018	External Elbow	81.90	1	4	1⅝
1028	Utility Box	154.30	1	10	7½
1035	Distribution Box	262.60	1	6	11¼
1039	Fixture Box	197.60	1	5	5¼
1048	Switch and Receptacle Box....	184.40	1	10	7¾
1082	Conduit Connector, 1" Female	211.40	1	10	4
1085	Combination Connector	69.80	1	10	4⅛
1086	Adjustable Offset Connector..	161.60	1	4	2⅝
1087	Kick Plate	87.50	1	10	5½
1089	Reducing Connector (from 1000 Twistout to 500 or 700 Wiremold)	36.80	5	20	2¾

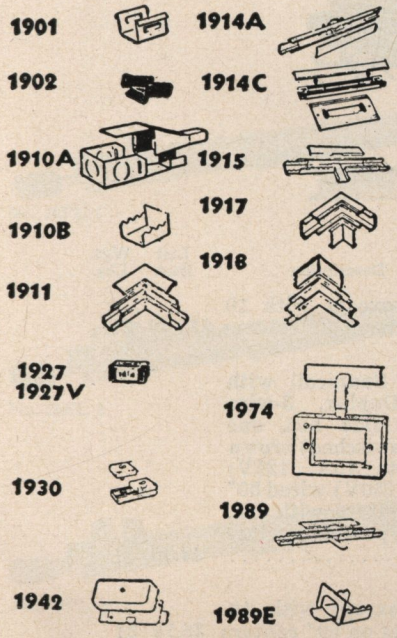
All items on this page are listed by Underwriters' Laboratories, Inc.

See Wiremold Wiring Guide for complete descriptive information and installation instructions.

No. 1500 PANCAKE



No. 1900 PLUGMOLD



WIREMOLD FITTINGS

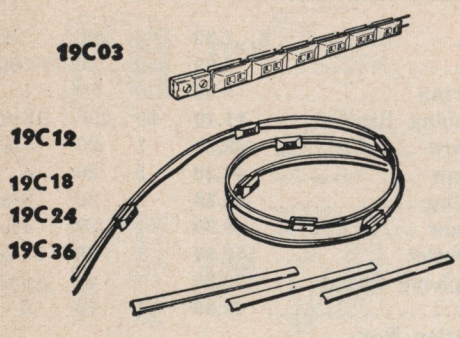
Cat. No.	Fitting	List Per 100 Pieces	Unit Pkge. Quantity	Std. Pkge. Quantity	Wgt. Lbs.
1500WC	Wire Clip	$ 1.90	20	200	½
1502	Bushing	8.90	10	40	¼
1504	Two Hole Strap	8.00	10	50	1
1508T	B-Station Tubing Bracket	11.40	20	200	12½
1511	90° Flat Elbow	49.10	1	20	3¼
1517	Internal Elbow	44.20	5	20	4
1517A	Adapter Fitting	59.30	5	20	3⅛
1518	External Elbow	48.90	1	20	4¾
1524*	Telephone Outlet	150.90	1	20	11½
1524A*	Narrow Telephone Outlet	123.90	1	20	6¾
1528	Utility Box	79.00	1	10	2
1542A	Narrow Junction Box (½" Female Bushing)	102.50	5	20	4½
1542B	Base for Floor Receptacle	290.00	1	10	7¾
1542D	Junction Box, Deep Type	87.90	5	20	7
1542G*	Narrow Junction Box for telephone use. Cover has clamp for B station tubing	115.00	5	20	4¼
1543L	Duplex Receptacle, 15A125V, 10A250V	184.30	1	20	15¾
1543AL	Polarized Duplex Receptacle, 3-Wire, 15A125V, 10A250V	506.90	1	10	8¾
1543GL	Grounded Duplex Receptacle 15A, 125V	261.00	1	20	16
1546A	Single Receptacle Box	147.50	1	10	6½
1546B	Duplex Receptacle Box	129.20	1	20	13
1546T*	Telephone Outlet Box	204.10	1	10	7½
1582T	B-Station Tubing Connector	48.60	20	200	23
1585	Combination Connector	50.30	5	20	4½
1599	Connector	40.00	1	10	1¼
1901	Coupling	5.20	5	50	¾
1902	Fibre Bushing	3.20	50	200	½
1910A	End Fitting	56.60	5	20	4
1910B	Blank End Fitting	11.50	5	20	⅜
1911	90° Flat Elbow	78.10	1	10	1⅞
1914A	Connector Fitting	105.90	2	20	5¾
1914C	Wall Box Connector	89.40	2	8	3¼
1915	Tee	78.40	3	30	6
1917	Internal Elbow	74.00	1	20	3
1918	External Elbow	79.00	1	10	1¾
1927	Receptacle (Brown) 15A125V; 10A., 250V.	54.20	5	50	2¾
1927V	Receptacle (Ivory) 15A125V; 10A., 250V.	65.90	5	50	2¾
1930	Connector Block	57.20	5	20	¾
1942	Junction Box	82.80	1	20	4
1974	Takeoff Connector	150.10	1	4	1⅝
1989	Reducing Connector (1900 to 500)	84.90	1	5	1¼
1989A	Reducing Connector (1900 to 200)	81.30	1	5	1¼
1989E	Reducing Connector (End of 1900 to 200)	21.50	5	20	⅜

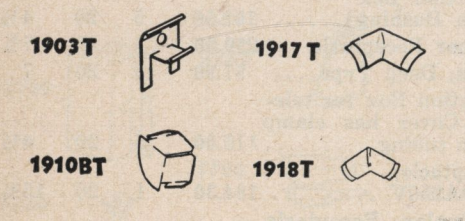
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WIREMOLD FITTINGS

WIRED PLUGMOLD No. 1900





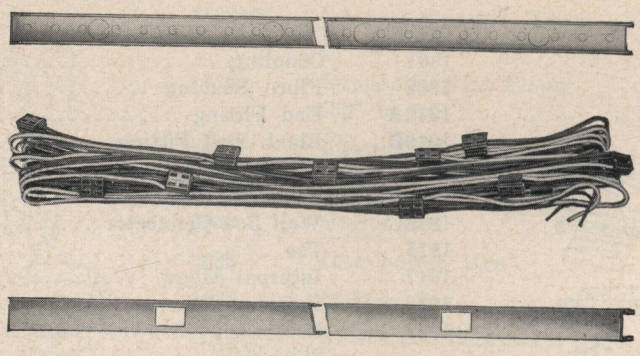
		List Each	Unit Pkge. Quantity	Std. Pkge. Quantity	Wgt. Lbs.
19306	3-Foot Length, 6 Outlets, 6″ on Centers	$5.40	1	10	12½
19606	6-Foot Length, 12 Outlets, 6″ on Centers	10.40	1	10	23¾
19618	6-Foot Length, 4 Outlets, 18″ on Centers	6.10	1	10	22¼

SNAPICOIL

		List Per Coil	Wgt. Per Coil
19C03	13-inch length with 6 brown receptacles and one 1930 connector block	$4.90	1⅛
19C03V	Same as 19C03 except receptacles are ivory	5.50	1⅛
19C12	25-foot coil with 25 brown receptacles wired 12″ on centers. 1900C cover sections furnished	22.40	5½
19C12V	Same as 19C12 except receptacles are ivory	25.00	5½
19C18	50-foot coil with 33 brown receptacles wired on 18″ centers. 1900C cover sections furnished	34.90	9¼
19C18V	Same as 19C18 except receptacles are ivory	38.30	9¼
19C24	50-foot coil with 25 brown receptacles wired 24″ on centers. 1900C cover sections furnished	28.80	9¼
19C24V	Same as 19C24 except receptacles are ivory	31.50	9¼
19C36	50-foot coil with 16 brown receptacles wired 36″ on centers. 1900C cover sections furnished	23.40	8¾
19C36V	Same as 19C36 except receptacles are ivory	25.10	8¾

Cat. No.	List Per 100 Pieces	Unit Package Quantity	Standard Package Quantity	Wgt. Lbs.
1903T	$ 5.00	10	100	1½
1910BT	11.30	10	40	⅜
1917T	28.10	5	20	⅜
1918T	27.30	5	20	1

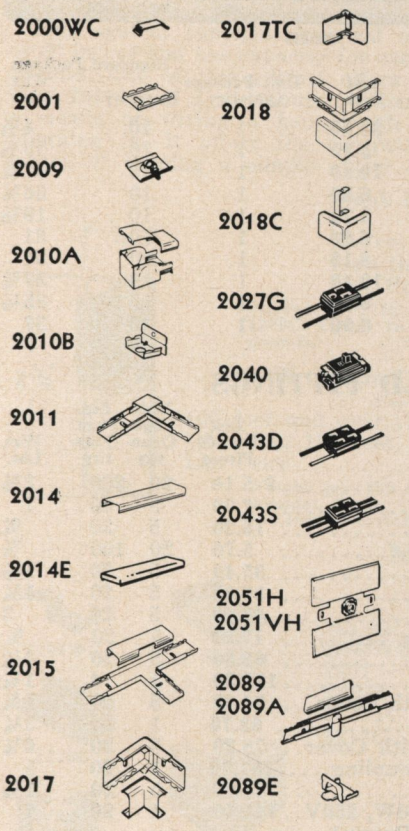
No. 2000 PLUGMOLD WITH SNAPICOIL



Cat. No.	Description	List Each	Wgt. Lbs.
20D30	50 ft. Snapcoil with 20 Duplex, 2-wire (both sides hot) brown outlets (15A, 125V; 10A, 250V) wired 30″ on centers with No. 12 Type TW conductors	$41.90	31
20D60	Same except with 10 outlets on 60″ centers	35.60	31
20G30	50 ft. Snapicoil with 20 NEMA Grounded brown outlets (15A, 125V) wired 30″ on centers with No. 12 Type TW conductors	41.60	31
20G60	Same except with 10 outlets on 60″ centers	$35.40	31
20S30	50 ft. Snapicoil with 20 Duplex, 3-wire (one side hot, one side switched) brown outlets 15A, 125V; 10A, 250V) wired 30″ on centers with No. 12 Type TW conductors	44.90	31
20S60	Same except with 10 outlets on 60″ centers	38.70	31

WIREMOLD FITTINGS

No. 2000* PLUGMOLD FITTINGS

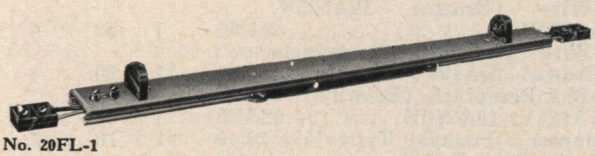


Cat. No.	Fitting	List per 100 pieces	Unit Package Quan.	Standard Package Quan.	Wgt. Lbs.
2000WC	Wire Clip	$ 3.00	20	200	¾
2001	Coupling, 2 in. long	6.30	5	50	1
2009	Ground Clamp	22.50	1	10	½
2010A	Entrance End Fitting	50.60	5	10	1¾
2010B	Blank End Fitting	13.60	5	20	½
2011	90° Flat Elbow	64.10	1	10	2
2014	Splice Cover	24.70	1	5	¾
2014E	Comb. End Fitting and Splice Cover	62.80	1	10	1¼
2015	Tee	95.90	1	10	3¼
2017	Internal Elbow	72.70	1	20	4¼
2017TC	Corner Coupling	16.30	5	20	1½
2018	External Elbow	68.20	1	10	2¼
2018C	External Elbow Cover	27.40	2	10	1
2027G*	Replacement Receptacle	92.60	1	10	1½
2027GV	Replacement Receptacle, Ivory	103.70	1	10	1½
2040	Switch	194.50	1	10	2¾
2043D*	Duplex, 2-wire, Replacement Receptacle	95.10	1	10	1½
2043DV	Duplex, 2-wire, Replacement Receptacle, Ivory	105.60	1	10	1½
2043S*	Duplex, 3-wire, Replacement Receptacle, Brown	112.10	1	10	2
2043SV	Duplex, 3-wire, Replacement Receptacle, Ivory	123.30	1	10	2
2051H	Wiremold Finish Flush Plate Adapter	110.40	1	5	2
2051VH	White Finish, Flush Plate Adapter	117.30	1	5	2
2089	Reducing Connector	92.20	1	5	1¾
2089A	Reducing Connector (No Cover)	92.70	1	5	1¾
2089E	Reducing Connector	15.50	5	20	½

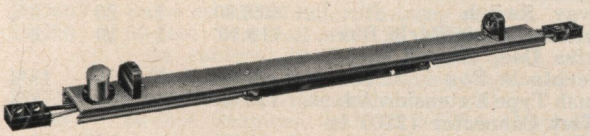
* Replacement receptacle. Furnished with 6" wire leads on each end.

No. 20FL SERIES FLUORESCENT FITTINGS

For Plugmold 2000



No. 20FL-1



No. 20FL-2

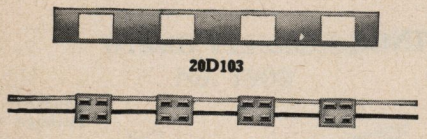


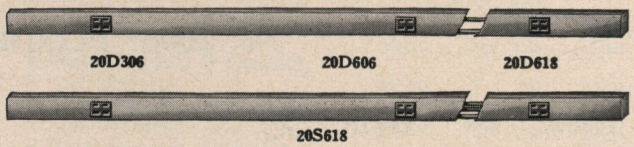
No. 20FL-3

- For new installations—and easily added to existing installations.
- Snaps into regular Plugmold 2000 base anywhere in the run.
- Just connect and snap it in—no need to break the Plugmold run and install a special fluorescent unit.

Cat. No.	Length of Cover Inches	Description	UNIT PKG. List Each	STD. PKG. Quantity	Wgt. Lbs.
20FL-1	24	With combination push-button and starter. For one 15-watt T-8 lamp.	$12.80	1	10	17¾
20FL-2	24	With FS-2 starter. For one 15-watt T-8 lamp.	12.80	1	10	17¾
20FL-3	24	With FS-2 starter and toggle switch. For one 15-watt T-8 lamp.	14.40	1	10	17¾

WIREMOLD—WIRED SECTIONS





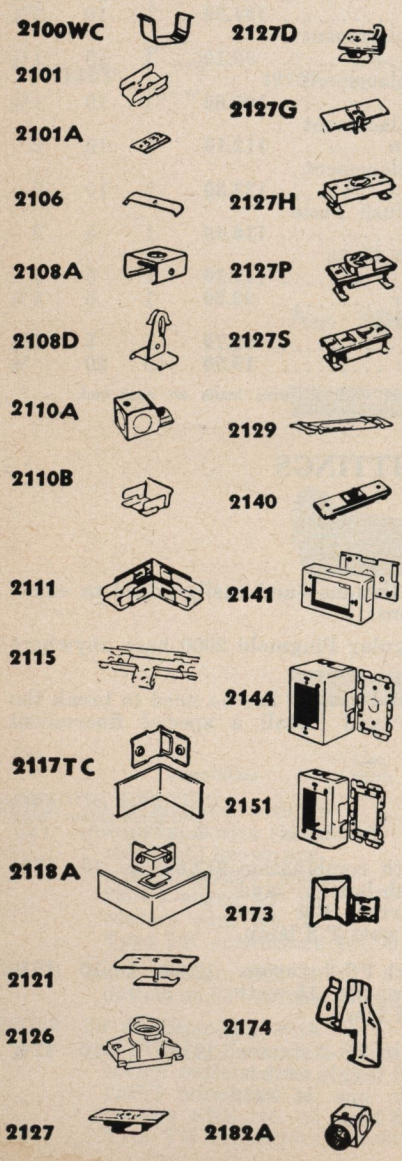
Cat. No.	Length	Outlets Number	Spacing
20D103†	1 foot	4	3″ Centers
20D306	3 feet	6	6″ Centers
20D606	6 feet	12	6″ Centers
20D618	6 feet	4	18″ Centers
20G306	3 feet	6	6″ Centers
20G509	5 feet	6	9″ Centers
20GV509	5 feet	6	9″ Centers
20G606	6 feet	12	6″ Centers
20G618	6 feet	4	18″ Centers
20S618	6 feet	4	18″ Centers

† 2000 Base not furnished.

Type	List Each	Unit Package Quantity	Standard Package Quantity	Wgt. Lbs.
2-Wire Duplex, Ivory	$3.80	1	10	4½
2-Wire Duplex, Brown	5.70	1	10	19½
2-Wire Duplex, Brown	10.40	1	10	37¾
2-Wire Duplex, Brown	6.50	1	10	36¼
NEMA Grounded, Brown	5.70	1	10	19½
NEMA Grounded, Brown	6.90	1	10	31
NEMA Grounded, Ivory	8.10	1	10	31
NEMA Grounded, Brown	10.40	1	10	37¾
NEMA Grounded, Brown	6.50	1	10	35½
3-Wire Duplex, Brown	6.90	1	10	37

WIREMOLD FITTINGS

No. 2100



Cat. No.	Fitting	List Per 100 Pieces	Unit Pkge. Quantity	Std. Pkge. Quantity	Wgt. Lbs.
2100WC	Wire Clip	$ 5.10	20	200	2⅜
2101	Coupling	7.70	5	20	1
2101A	Rigid Coupling	18.20	5	20	¾
2106*	Cover Clip	5.70	20	100	⅞
2108A	Hanger Clamp	35.40	5	20	1½
2108D	Fixture Hook	36.00	5	20	1¼
2110A	End Connector	41.20	5	20	3
2110B	Blank End Fitting	17.30	5	20	¾
2111	90° Flat Elbow	62.30	5	20	4¼
2115	Tee	112.20	1	4	1¼
2117	Internal Elbow with Cover	74.40	5	20	5¾
2117TC	Corner Coupling	63.70	1	20	3¼
2118	External Elbow with Cover	78.20	5	20	6¼
2118A	External Corner Coupling	101.80	1	20	5
2121*	Telephone Outlet	41.00	5	20	1½
2126	Keyless Socket, 660W, 250V	141.40	1	20	7
2127	Plug Receptacle (Brown) 15A125V, 10A250V	74.40	1	40	3¾
2127V	Plug Receptacle (Ivory) 15A125V, 10A250V	82.50	1	40	3¾
2127D	Lumiline Single Rec. 660W, 250V	91.40	2	20	1¼
2127G	NEMA-Grounded Receptacle 15A, 125V	96.10	1	40	4
2127H	Midget Twist-Lock Receptacle 2-Wire (Brown) 15A125V, 10A250V	263.00	1	20	4
2127P	3-Wire Polarized Receptacle (Brown) 15A125V, 10A250V	282.80	1	20	3
2127S	T-Slot Receptacle (Brown) 15A125V, 10A250V	115.60	1	40	5¼
2129	Adapter (Condulet Type ½″)	76.40	1	10	1
2140	Single Pole Switch 10A125V, 5A250V	214.10	1	20	5¼
2140B	3-way Switch	228.80	1	20	5¼
2141	Switch & Receptacle Box	119.10	1	10	6
2144	Extra Deep Switch & Receptacle Box	181.40	1	20	18¾
2151	Flush Type Extension Adaptor	125.00	1	10	5½
2173	Offset Connector (2100 to 1500)	39.30	1	10	1
2174	Takeoff Connector (2100 to 500 or 700)	68.40	1	10	2
2182A	End Fitting (¾″ Female Bushing)	109.60	1	20	5½
21211	Cover for 12″ Lumiline Lamp	19.00	1	10	1⅜
21212	Cover for 18″ Lumiline Lamp	39.60	1	10	2¼

All items on this page except * are listed by Underwriters' Laboratories, Inc.
See Wiremold Wiring Guide for complete descriptive information and installation instructions.

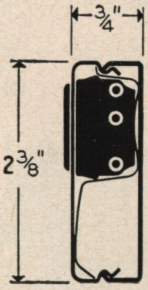
WIREMOLD FITTINGS

No. 2200 PLUGMOLD BASEBOARD

It's a BASEBOARD . . . It's a MULTI-OUTLET SYSTEM . . . It's a METAL RACEWAY SYSTEM

This system supplies electrical outlets every 30 or 60 inches and has capacity for carrying additional circuits. Use of this system offers the builder the sales feature of a multi-outlet system together with a means of wiring a house with a minimum of roughing in. It offers the contractor a profitable means of turning a simple outlet installation into a complete electrical wiring job. It offers the home owner more and conveniently placed outlets.

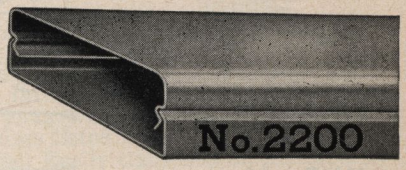
Plugmold baseboard is fabricated from .040 in. steel and is packaged in compact, easy to stock, easy to handle cartons. Pre-wired Snapicoil receptacles save on the job installation time. The only tools required are a screw-driver and a hack saw.



Blank Fill-in Cover and Base

	Per 100 ft.
50 feet and over	$33.60
Less than 50 feet	37.00
List Price	56.00

Packed 10 5 ft. lengths of each 2200B Base and 2200C Cover to carton. Weight per carton, 47 pounds.



2200B (Channel)	Per 100 ft.	2200C (Blank Cover)	Per 100 ft.
100 feet and over	$15.50	100 feet and over	$18.10
Less than 100 feet	17.10	Less than 100 feet	19.90
List Price	25.80	List Price	30.20

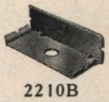
Weight per 100 feet—Channel (10 ft. lengths), 45 pounds; Cover (10 ft. lengths), 49 pounds; each 100 feet to carton.

Capacity: Type R or RH With Devices: 4 No. 8; 6 No. 10; 10 No. 12; 10 No. 14. Type T, TW, or RU With Devices; 3 No. 6; 7 No. 8; 10 No. 10; 10 No. 12; 10 No. 14. Type T, TW, or RU With Devices when 2217TC is Used as Through Fitting: 4 No. 8; 6 No. 10; 8 No. 12; 10 No. 14.

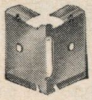
No. 2200 PLUGMOLD BASEBOARD FITTINGS


2200WC

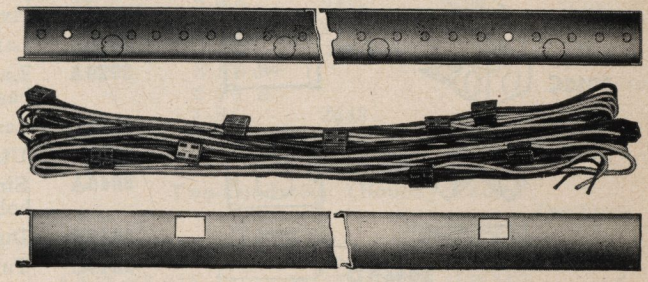

2201


2210B


2218C


2217TC

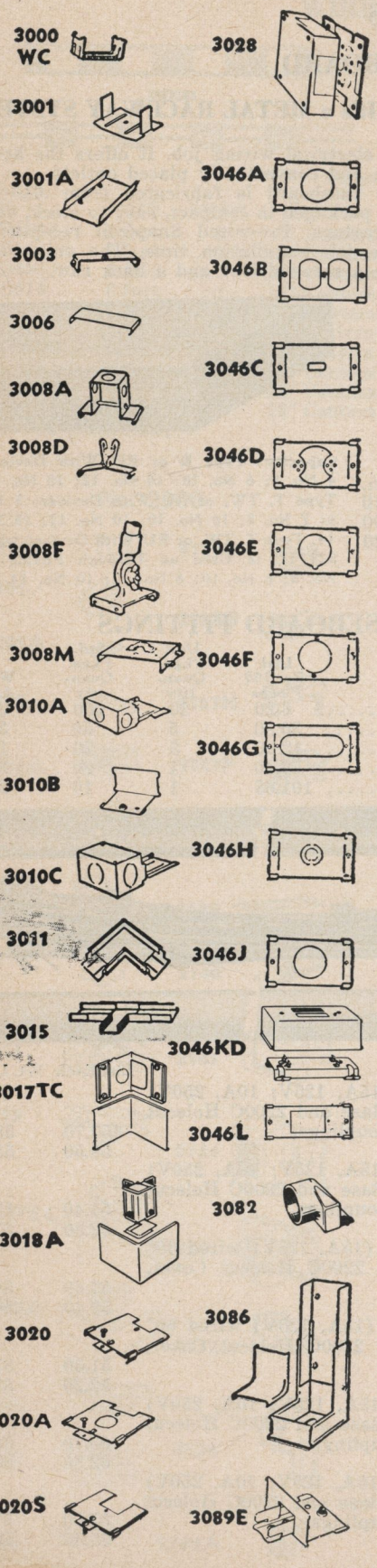
Cat. No.	Fitting	List Per 100 Pieces	Unit Pkge. Quantity	Std. Pkge. Quantity	Wgt. Lbs.
2200WC	Wire and Device Clip	$ 6.20	20	200	2¾
2201	Coupling	30.80	5	50	3¾
2210B	Blank End Fitting	12.90	5	20	1¼
2217TC	Corner Coupling	52.40	1	20	3
2218C	External Elbow Cover	101.65	1	10	2¾



No. 2200 Plugmold Baseboard with Snapicoil (wired with No. 12 Type TW Conductors).

Cat. No.	Description	List Each	Wt. Lbs.
22D30	50-foot Snapicoil with 20 Duplex, 2-wire brown outlets (15A, 125V; 10A, 250V) wired 30″ on centers, 10 5-foot lengths each of 2200B Base and 2200C Holecut Cover, 20 2200WC Wire and Device Clips, and 10 2201 Couplings.	$57.70	58
22D30V	Same as 22D30 but with ivory outlets.	59.50	58
22D60	50-foot Snapicoil with 10 Duplex, 2-wire brown outlets (15A, 125V; 10A, 250V) wired 60″ on centers, 10 5-foot lengths each of 2200B Base and 2200C Holecut Cover, 10 2200WC Wire and Device Clips, and 10 2201 Couplings.	51.40	57
22D60V	Same as 22D60 but with ivory outlets.	52.30	57
22G30	50-foot Snapicoil with 20 NEMA Grounded brown outlets (15A, 125V) wired 30″ on centers, 10 5-foot lengths each of 2200B Base and 2200C Holecut Cover, 20 2200WC Wire and Device Clips, and 10 2201 Couplings.	57.40	58
22G30V	Same as 22G30 but with ivory outlets.	59.40	58
22G60	50-foot Snapicoil with 10 NEMA Grounded brown outlets (15A, 125V) wired 60″ on centers, 10 5-foot lengths each of 2200B Base and 2200C Holecut Cover, 10 2200WC Wire and Device Clips, and 10 2201 Couplings.	51.30	57
22G60V	Same as 22G60 but with ivory outlets.	52.20	57
22S30	50-foot Snapicoil with 20 Duplex 3-wire brown outlets (15A, 125V; 10A, 250V) wired 30″ on centers, 10 5-foot lengths each of 2200B Base and 2200C Holecut Cover, 20 2200WC Wire and Device Clips, and 10 2201 Couplings.	60.70	58
22S30V	Same as 22S30 but with ivory outlets.	62.50	58
22S60	50-foot Snapicoil with 10 Duplex, 3-wire brown outlets (15A, 125V; 10A, 250V) wired 60″ on centers, 10 5-foot lengths each of 2200B Base and 2200C Holecut Cover, 10 2200 WC Wire and Device Clips, and 10 2201 Couplings.	54.50	57
22S60V	Same as 22S60 but with ivory outlets.	55.40	57

No. 3000



WIREMOLD FITTINGS

Prices cover 3000 fittings in WIREMOLD finish.
For white finish, see Fluorescent List No. FL-9.

Cat. No.	Fitting	List Per 100 Pieces	Unit Pkge. Quantity	Std. Pkge. Quantity	Wgt. Lbs.
†3000WC	Wire Clip	$10.40	10	40	3
†3001	Coupling	26.80	2	20	2½
†3001A	Rigid Inside Coupling	40.00	2	10	3½
3001B	Rigid Outside Coupling	190.30	2	8	7¼
3003	Supporting Clip	24.80	5	50	2½
3006	Cover Clip	6.90	10	40	1½
3008	Hanger Assembly (With ⅜" Pipe Nipple)	295.70	1	10	8
3008A	Hanger Clamp	71.20	1	10	2
3008C	Hanger Casting (Tapped for ½" Conduit)	203.20	1	4	4½
3008D	Loop Hanger	49.90	2	20	1¾
3008F	Adjustable Ratchet Hanger (Tapped for ½" Conduit)	309.80	1	4	3¾
3008M	Messenger Cable Hanger	107.50	5	10	1½
3010A	End Fitting ½" Knockout	84.50	1	20	6
3010B	Blank End Fitting	29.40	5	20	2
3010C	End Fitting 1" Knockout	140.60	1	5	2
3011	90° Flat Elbow	182.50	1	5	3¼
3015	Tee	320.60	1	5	8½
3017	Internal Elbow	209.50	1	4	5¼
3017TC	Corner Coupling	83.20	1	4	2
3018	External Elbow	172.50	1	5	3¼
3018A	External Corner Coupling	125.50	1	4	3
3020	Lampholder Clamp	52.20	2	20	2¾
3020A	Lampholder & Starter base clamp	54.60	2	20	2½
3020S	Lampholder Clamp	54.60	2	20	2¾
3028	Utility Box	433.10	1	6	11½
3046A	Single Receptacle Cover dia. of hole: 1 13/32"	62.30	1	10	2
3046B	Duplex Receptacle Cover	62.30	1	10	2
3046C	Tumbler Switch Cover	62.30	1	10	2
3046D	Surface Device Cover	62.30	1	10	2
3046E	Screw Type Sign Receptacle Cover	62.30	1	10	2
3046F	Surface Type Sign Receptacle Cover	62.30	1	10	2
3046G	Condulet Device Cover	62.30	1	10	2
3046H	Fixture and Drop Cord Cover	62.30	1	10	2
3046J	Single Receptacle Cover dia. of hole: 1 17/32"	62.30	1	10	2
3046K	Circuit Breaker Cover	263.70	1	5	2¾
3046KD	Circuit Breaker Housing	403.30	1	4	6
3046L	Fustat device cover	79.70	1	10	2¼
3082	Conduit Connector	655.30	1	10	4
3086	Adj. Offset Connector	366.50	1	5	6¼
3089E	Reducing Connector	74.60	2	10	2¾

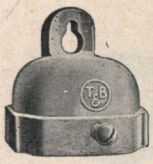
† Unpainted

See Wiremold Wiring Guide for complete descriptive information and installation instructions.

All items on this page are listed by Underwriters' Laboratories, Inc.

T & B SERVICE ENTRANCE FITTINGS

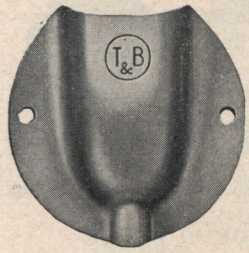
SERVICE ENTRANCE CAPS
Approved by Underwriters Laboratories



Has only two parts, weatherproof aluminum cap and phenolic insulator. One clamping screw holds the cable and insulator, and grounds the cap to the bare neutral. The deep hood shields the end of the cable from all weather. One-screw mounting. One-piece molded composition insulator eliminates threading of conductors.

Cat. No.	Maximum Cable Size	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
5549	2-#6	5	50	16	$78.75
5550	3-#6 or 3-#8	5	50	20	78.75
5551	3-#4 or 3-#6	5	50	30	115.00
5552	3-#2	2	10	80	200.00

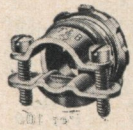
ALUMINUM WALL PLATE



Made of solid formed aluminum. Accommodates a maximum of 3—#4 wires in the service cable and a maximum of 1—#4 for ground connection. Furnished with non-drying Dux Seal Caulking Compound. Complete with 2—#8 screws.

Cat. No.	Cable Size	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
5546	Serv. Cable Max. 3W4	10	100	11	32.00

SERVICE ENTRANCE CABLE CONNECTORS NON-WATERTIGHT



Precision made. All edges are rounded. No sharp burrs to harm conductors. The screws thread into the saddle, not the body. Made of steel, protected from corrosion with silvery Tabolite galvanizing.

No. 3302 fits non-metallic sheathed cables.
Non-Met. Cable—14-2, 14-3, 12-2, 12-3, 10-2
Serv. Ent. Cable—12-2, 12-3, 10-2, 8-2, 6-2, 4-2 or any non-metallic cable .250″ to .650″ dia.
No. 3303 fits non-metallic sheathed cables.
Non-Met. Cable—14-3, 12-3, 10-3, 8-2
Serv. Ent. Cable—10-3, 8-3, 6-2, 6-3, 4-2, 2-2 or any non-metallic cable .450″ to .800″ dia.
No. 3304 fits non-metallic sheathed cables.
Non-Met. Cable—6-2, 4-2
Serv. Ent. Cable—8-3, 6-3, 4-3.
or any non-metallic cable .530″ to 1.035″ dia.

Cat. No.	Size Inches	Opening Max.	Opening Min.	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
3302	⅜	.656	.250	100	1000	6	$15.00
3303	¾	.800	.450	25	100	17	44.00
3304	1	1.035	.530	10	50	28	60.50
3305	1¼	1.250	.812	5	10	40	92.50

CABLE STRAPS



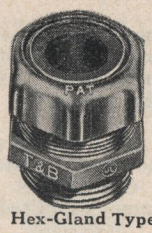
No. 1341 **No. 1345**

Designed to take the entire range of Service Entrance Cable. Malleable iron, hot dip galvanized.

Cat. No.	Cable Size	Unit Pkg.	Std. Pkg.	Wt.	Price Per 100
1341	2W12, 2W10, 2W8, 2W6, 3W12	50	100	3	$7.25
1344	2W4, 3W10, 3W8, 3W6	50	100	5	8.00
1345	2W2, 3W4, 3W2	50	100	6½	8.50

T & B SERVICE ENTRANCE FITTINGS

WATERTIGHT SERVICE ENTRANCE CABLE CONNECTORS
Approved by Underwriters Laboratories



Hex-Gland Type



Two-Screw Type

Hex-Gland Type: Full hex gland for easier tightening; clean cut threads. Beveled ends of neoprene bushing form a snug watertight fit on cable. Only commonly used sizes listed below.

Two-Screw Type: Easily tightened on the cable by two screws. The cap gives maximum protection to the neoprene bushing. Both cap and body are smooth, accurate die castings.

Color Coding

T&B has color coded the popular sizes in these connectors with a double identification.

Neoprene rubber bushings are colored and a colored paper disc bears the catalog number and cable identification.

COLOR CODE CHART FOR COMMON SEC SIZES

Threaded Hub Size	Cable Size	Hex Gland Cat. No.	2-Screw Cat. No.	Color Code
¾″	2 #8, 2 #6	2229	2504	Yellow
1″	2 #8, 2 #6	2429	2604	Yellow
¾″	3 #8	2233	2514	Green
1″	3 #8	2433	2614	Green
1″	3 #6	2438	2625	Blue
1″	3 #4	2439	2627	Brown
1¼″	3 #2	2446	....	Gray
1¼″	3 #3 or 2 #3 & 1 #5	2443	....	Red

SIZE CHART FOR Two-Conductor (Round) Cables

Cable Size	Cable Type	Hex Nut Type Th. ½″	Hex Nut Type Th. ¾″	Hex Nut Type Th. 1″	Two-Screw Type Th. ¾″	Two-Screw Type Th. 1″
2 #12 or 2 #10	ASE, SE	2196	2229	2429		
	SD	2195	2228	2428		
2 #8 or 1 #8 & 1 #10	ASE, SE, SD	2196	2229	2429	2504	2604
2 #6 or 1 #6 & 1 #8	ASE, SE, SD	2196	2229	2429	2504	2604

Three-Conductor (Oval) Cables

3 #12	ASE	....	2232	2432		
	SE, SD	2111	2232	2432		
3 #10 or 2 #10 & 1 #12	ASE	....	2233	2433		
	SE	2111	2232	2432		
	SD	....	2233	2433	2514	2614
3 #8 or 2 #8 & 1 #10	ASE, SE, SD	....	....	2438	....	2625
3 #6 or 2 #6 & 1 #8	ASE, SE	....	2233	2433	2514	2614
	SD	....	....	2439	....	2627
3 #4 or 2 #4 & 1 #6	ASE, SE	....	....	2438	....	2625
	SD	....	....	2446		
3 #2 or 2 #2 & 1 #4	ASE, SE, SD				1¼″ thread	
3 #3, or 2 #3 & 1 #5					2443 1¼″ thread	
3 #1/0					2447 1½″ thread	

PRICES

Connectors With:	Std. Pkg.*	Unit Quant.	Weight per 100	Price per 100
½″ Hubs	100	10	18	$72.50
¾″ Hubs	100	10	18	72.50
1″ Hubs	100	10	22	90.00
1¼″ Hubs	50	5	27	187.50

*Assortment Privilege

Unit Quantities combine with one Standard Package to obtain Standard Package Price on the lot.

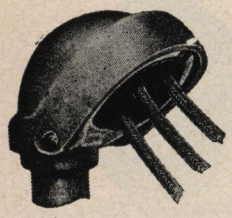
Less than Unit Quantities take Less-Than-Unit-Quantity prices, regardless of assortment privilege.

T & B ENTRANCE FITTINGS

Approved by Underwriters Laboratories

T & B ENTRANCE CAPS

For Standard Rigid Conduit



May be used in both vertical and horizontal positions with entrance holes always 45° from the weather.

Insulator is of heavy composition, moulded to set in the frame. Cap is hot galvanized; frame Tabolited.

Cat. No.	Size In.	Holes In Insulator	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
1525	½	4	10	50	68	$70.00
1521	¾	5	5	50	84	95.00
1522	1	5	5	25	136	130.00
1523	1¼	5	1	10	220	175.00
1524	1¼	7	1	10	240	175.00
1529	1½	6	1	5	240	300.00
1530	2	6	1	5	1200	575.00
1531	2½	7	1	1	1600	1800.00
1532	3	7	1	1	2900	2500.00
1533	3½	7	1	1	2800	3400.00
1534	4	7	1	1	2800	4000.00

T & B ENTRANCE ELLS

Approved by Underwriters Laboratories

For Standard Rigid Conduit

Designed for a straight pull in either direction. It mounts flush on the wall, eliminating any need for bending conduit.



Cover is held in place with one screw which does not come out. Made of heavy cast iron and plated with Tabolite.

Cat. No.	Size Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
1490	½	5	50	76	$100.00
1491	¾	5	50	88	130.00
1492	1	5	25	136	190.00
1493	1¼	5	10	260	320.00
1494	1½	1	5	360	500.00
1495	2	1	1	520	800.00
1496	2½	1	1	400	2700.00
1497	3	1	1	1200	2800.00

T & B CAPPED ELBOWS

Approved by Underwriters Laboratories



Eliminate fishing of wires through sharp bends. They are smooth on the interior, all openings bushed to prevent abrasion. Made of cast iron, plated with Tabolite to resist corrosion.

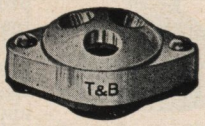
Cat. No.	Size Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
1480	½	10	50	46	$100.00
1481	¾	5	50	62	120.00
1482	1	5	25	64	170.00
1483	1¼	5	10	200	450.00
1484	1½	2	5	320	700.00

T & B ENTRANCE FITTINGS

Approved by Underwriters Laboratories

T & B STRAIGHT INSULETS®

Insulator has three wire holes with one hole plugged. For all conduit sizes, from ½- to 1¼-inch.



Cat. No.	Size Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
1610	½	25	100	18	$40.00
1611	¾	25	100	22	55.00
1612	1	5	50	44	82.50
1613	1¼	5	25	96	330.00

ROUND TYPE INSULET®

Plated with Tabolite; insulator has three wire holes with one hole plugged.

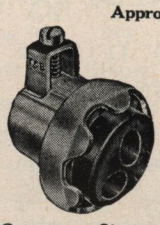


U/L

Cat. No.	Description	Unit Pkg.	Std. Pkg.	Pkg. Wt.	Price Per 100
1660	½" Round type Insulet	25	100	11	$33.00

INSULETS® FOR ARMORED CABLE

Approved by Underwriters Laboratories



This T&B Insulet has a Tite-Bite Grip made to hold all ⅜-inch sizes of Armored Cable, as well as Nonmetallic Cable.

Insulator has three wire holes with one hole plugged.

Cat. No.	Size Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
1665	⅜	25	100	17	$40.63

T & B ANGLE INSULETS®

Approved by Underwriters Laboratories

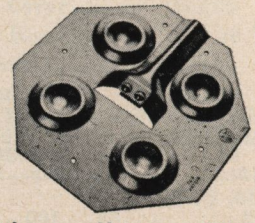
These Insulets can be used as a service entrance on horizontal conduit, or as an inside installation. Insulator has three wire holes, with one hole plugged.



Cat. No.	Size Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
1640	½	5	50	38	$85.00
1641	¾	5	50	56	95.00
1642	1	6	30	100	150.00
1643	1¼	5	25	143	300.00

POLE GROUND PLATE

Patented



Cat. No.	Std. Pkg.	Unit Qty.	Wt. Lbs. Per 100	Price Per 100
5575	50	10	50	$162.50

T & B GROUNDING FITTINGS

Approved by Underwriters Laboratories

GROUNDING WEDGES



No. 3650

Do away with all jumper wires.

Each grounding wedge is marked T & B and size of conduit with which it is to be used.

Cat. No.	Size In.	Unit Pkg.	Std. Pkg.	Price Per 100	Cat. No.	Size In.	Unit Pkg.	Std. Pkg.	Price Per 100
3650	½	50	100	$30.00	3656	2½	5	10	$237.50
3651	¾	50	100	35.00	3657	3	5	10	300.00
3652	1	25	50	45.00	3658	3½	2	5	537.50
3653	1¼	25	50	58.75	3659	4	2	5	600.00
3654	1½	25	50	85.00	3661	5	2	2	1100.00
3655	2	10	25	127.50	3662	6	2	2	1375.00

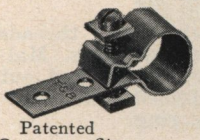
GROUNDING BUSHINGS



No. 3860-3869

Cat. No.	Size In.	Unit Quan.	Std. Pkg.	Price Per 100	Cat. No.	Size In.	Unit Quan.	Std. Pkg.	Price Per 100
3860	½	50	100	$37.50	3865	2	10	25	$245.00
3861	¾	50	100	47.50	3866	2½	5	10	390.00
3862	1	25	50	63.75	3867	3	5	10	487.50
3863	1¼	25	50	87.50	3868	3½	1	5	875.00
3864	1½	25	50	145.00	3869	4	1	5	1300.00

GROUND STRAPS



Patented

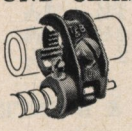
Wrap-around type of ground clamp, made of copper. Has four adjustment holes and knurled clamp for quick secure hold on ground wire.

Cat. No.	Size Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
961	⅜ to 1.....	100	1000	9	$41.25
962	⅜ to 2.....	100	1000	13	55.00
963	⅜ to 3.....	100	1000	17	82.50

GENERAL PURPOSE GROUND CLAMP



No. 3846



No. 3847

For Unarmored Wire—No. 6, No. 4

Fits ½- to ¾-inch Copper Tubing; ½- to ¾-inch Water Pipe; ½- to 1-inch Ground Rod.

Cat. No.	Material	Unit Quan.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
3846	Bronze	5	50	20	$60.00
3826	M.I.	5	50	20	50.00

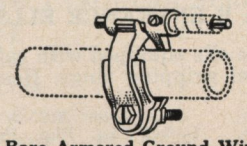
For Armored Wire—No. 8, No. 6, No. 4

Similar to No. 3846 above, but with a socket to hold armor and a set screw to secure it.

Cat. No.	Material	Unit Quan.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
3847	Bronze	5	50	22	$87.50
3827	M.I.	5	50	22	70.00

MALLEABLE IRON GROUND FITTINGS

Approved by Underwriters' Laboratories



For Nos. 8 and 6 Bare Armored Ground Wire and No. 4 Bare Unarmored Copper Wire ½, ¾ and 1-inch Waterpipe with Set Screw to hold Armor of the No. 8 and No. 6 Wire. No. 3843 same as No. 3841 with addition of cast jaw filler.

Cat. No.	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
3841	5	25	38	$87.50
3843	5	25	48	$87.50

T & B GROUNDING FITTINGS

Approved by Underwriters Laboratories

FOR UNARMORED WIRE

Solderless Ground Fittings

For Nos. 6 and 4 B&S Bare or Insulated Copper Wire to ½, ¾ and 1-Inch Waterpipe

3840	5	25	38	$68.75

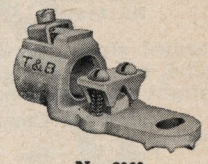
For Nos. 6 and 4 B&S Bare or Insulated Copper Wire to Ground Rod from ½-Inch Up and ½, ¾ and 1-Inch Waterpipe

3842	5	25	48	$68.75

CONDUIT HUBS



No. 3930



No. 3960

CONDUIT HUBS

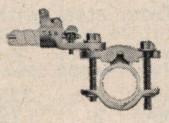
Cat. No.	Size Inches	Unit Quan.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
3930	½-inch Conduit..	5	25	24	$57.50
3940	¾-inch Conduit..	5	20	30	197.50
3950	1 -inch Conduit..	5	10	40	392.50
3970	½-inch Adj.	5	25	40	140.00
3960	Armored Wire	5	25	24	227.50

WATERPIPE CLAMPS

(Complete Ground Fittings for Unarmored Wire)

2	½, ¾ or 1	5	25	44	80.00
3	1¼, 1½ or 2	5	10	80	137.50
4	2½, 3 or 3½....	2	4	140	662.50
5	4 , 4½ or 5	2	4	200	1000.00
6	6	..	1	300	1500.00

FOR STANDARD RIGID CONDUIT



A new line of ground fittings, simple in design and easy to install. Each fitting takes a wide range of sizes.

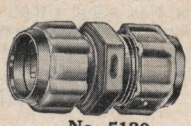
Interchangeable conduit hubs and waterpipe clamps can be supplied separately.

Cat. No.	Water Pipe Size	Quan. Unit	Pkg. Std.	Per 100 Wt. Lbs.	Per 100 Price
	FOR ¼-INCH CONDUIT				
3932	½, ¾ or 1	5	25	68	150.00
3933	1¼, 1½ or 2	5	10	100	215.00
3934	2½, 3 or 3½....	2	4	150	775.00
3935	4 , 4½ or 5	2	4	195	1175.00
3936	6	..	1	240	1725.00
	FOR ¾-INCH CONDUIT				
3942	½, ¾ or 1	5	25	72	$305.00
3943	1¼, 1½ or 2	5	10	100	370.00
3944	2½, 3 or 3½....	2	4	170	950.00
3945	4 , 4½ or 5	2	4	200	1325.00
3946	6	..	1	240	1875.00
	FOR 1-INCH CONDUIT				
3952	½, ¾ or 1	5	10	80	525.00
3953	1¼, 1½ or 2	5	10	110	575.00
3954	2½, 3 or 3½....	2	4	180	1150.00
3955	4 , 4½ or 5	2	4	200	1525.00
3956	6	..	1	245	2075.00
	FOR ½-INCH CONDUIT (ADJUSTABLE)				
3972	½, ¾ or 1	5	25	76	250.00
3973	1¼, 1½ or 2	5	10	80	300.00
3974	2½, 3 or 3½....	2	4	155	875.00
3975	4 , 4½ or 5	2	4	200	1250.00
3976	6	..	1	240	1800.00
	FOR ARMORED WIRE				
3962	½, ¾ or 1	5	25	68	337.50
3963	1¼, 1½ or 2	5	10	100	400.00
3964	2½, 3 or 3½....	2	4	150	1000.00
3965	4 , 4½ or 5	2	4	300	1350.00
3966	6	..	1	240	1900.00

T & B FITTINGS FOR EMT
(Thinwall Conduit)
Approved by Underwriters Laboratories

RAINTIGHT BOX CONNECTORS, AND COUPLINGS


No. 5121

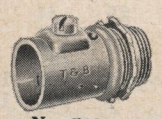

No. 5120

Formed steel ribbed glands, with opposite faces parallel, are easily tightened with wrench or pliers. Raintight construction.

Raintight Couplings and Connectors

Couplings Cat. No.	Price Per 100	Size Inches	Unit Pkg.	Std. Pkg.	Connectors Cat. No.	Price Per 100
5118	$50.00	⅜	50	200	5119	$42.50
5120	34.25	½	50	500	5121	28.13
5220	46.88	¾	25	250	5221	40.00
5320	72.75	1	25	100	5321	60.88
5420	132.50	1¼	5	25	5421	115.00
5520	190.00	1½	2	10	5521	175.00
5620	265.00	2	2	5	5621	247.50

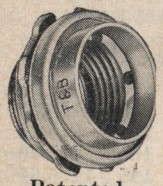
SET SCREW COUPLING AND CONNECTOR


No. 5130


No. 5131

These fittings have a peep hole to show that the conduit is in place and hardened points on the set screws to hold it there. Made from steel with a bright Tabolite finish.

Cat. No.	Description	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
5130	½-inch Coupling	50	500	8½	$25.00
5131	½-inch Connector	50	500	8	18.75


Patented

T & B SOCKS® CONNECTORS

Cat. No.	Size In.	Unit Quan.	Std. Pkg.	Wt.Lbs. Per 100	Price Per 100
5181	½	200	1000	3	$19.50
5281	¾	100	500	4½	26.13
5381	1	25	50	7	40.00

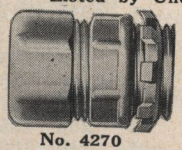
T & B SOCKS® COUPLINGS

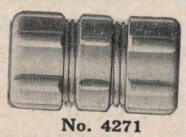
U/L



Cat. No.	Size In.	Unit Quan.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
5180	½	50	250	8½	$39.38
5280	¾	25	100	11	52.50
5380	1	25	50	18	71.88

T & B COUPLING AND CONNECTOR
Listed by Underwriters' Laboratories


No. 4270

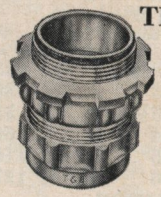

No. 4271

Light steel fittings for use where a raintight fitting is not needed. Smooth interior free from burrs.

Cat. No.	Description	Unit Pkg.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
4270	½-inch Coupling	50	500	11	$31.25
4271	½-inch Connector	50	500	8½	24.38

T & B FITTINGS FOR EMT
(Thinwall Conduit)
Approved by Underwriters Laboratories

INSULATED THROAT E.M.T. CONNECTOR

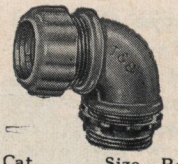


TM

Completely self insulated. A bright blue insulating liner completely covers the area inside the connector throat and provides a rounded, burr-free passage for wiring. The liner is extremely tough with a smooth, resilient surface—unaffected by common acids, solvents, moisture, and fumes. A lip protrudes slightly beyond the connector body forming a tell-tale bright blue ring—similar to other T&B "blue" fittings —visual assurance for an inspector that the connection is insulated.

Cat. No.	Size Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
5123	½	50	500	10	$ 38.50
5223	¾	25	250	14	54.00
5323	1	25	100	23	83.00
5423	1¼	5	25	46	144.00
5523	1½	2	10	59	210.00
5623	2	2	5	80	312.00

T & B RAINTIGHT SHORT ELBOWS

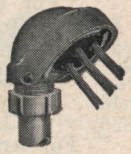


Accurate, machine-cut threads and carefully bushed edges. Malleable iron, plated inside and out with Tabolite. Supplied with a slotted steel gripping ring.

Cat. No.	Size Inches	Radius Inches	Offset Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
4230	½	9/16	11/16	25	50	22	$ 92.50
4231	¾	11/16	13/16	25	50	32	145.00
4232	1	13/16	15/16	5	25	52	222.50
4233	1¼	1 1/16	1 7/32	2	10	80	562.50
4234	1½	1 3/16	1 11/32	2	10	160	800.00
4235	2	1 7/16	1 5/8	2	10	240	1225.00

T & B ENTRANCE CAPS FOR EMT

The T&B Entrance Cap for thinwall conduit is the standard T&B Entrance Cap for heavywall conduit, with a thinwall conduit connector at the base. Furnished with a heavy composition insulator. Made of heavy cast-iron, plated with Tabolite superior galvanizing. 4 hole insulator.



Cat. No.	Size Inches	Unit Quan.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
5525	½	10	50	74	$145.00
5526	¾	5	50	104	160.00
5527	1	5	25	160	225.00
5528	1¼	1	10	140	450.00

T & B ENTRANCE ELLS

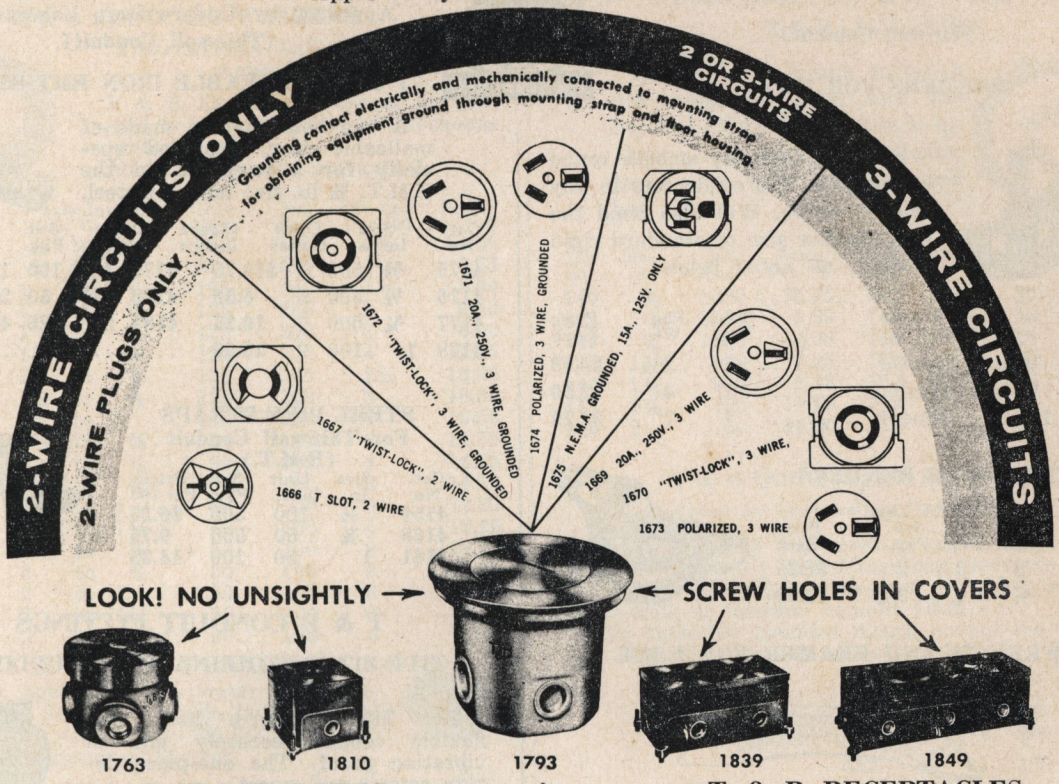
Neat, malleable ells equipped with raintight glands and serrated steel gripping rings. Heavy protective plating.



Cat. No.	Size Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
5490	½	5	50	58	$217.50
5491	¾	5	20	92	287.50
5492	1	5	10	140	400.00
5493	1¼	1	10	255	875.00
5494	1½	1	5	310	1675.00
5495	2	1	5	500	2100.00

THOMAS AND BETTS FLOOR BOXES AND FLOOR BOX RECEPTACLES

Approved by Underwriters' Laboratories



T & B FLOOR BOXES WATERTIGHT

Cat. No.	Description	Unit Pkg.	Std. Pkg.	Wt. Lbs. Each	Price Each
1703	Telephone or Signal	1	10	2	$6.00
1700	Two-wire	1	12	2	8.00
1701	Three-wire	1	10	2¼	13.50
1729	NEMA Grounded Receptacle (1728 Bell Nozzle Extra)	1	10	2	13.00
1793	Box without Receptacle	1	10	2	6.00

ADJUSTABLE WATERTIGHT

SHALLOW SERIES

1763	Telephone or Signal	1	..	3½	13.00
1760	Two-wire	1	..	3½	14.00
1761	Three-wire	1	..	3½	18.00
1779	NEMA Grounded Receptacle	1	..	4	18.00

RECTANGULAR SERIES

1810	One-gang	1	..	9	16.00
1820	Two-gang	1	..	15	31.00
1830	Three-gang	1	..	21	46.00
1829	NEMA Grounded Recp.1-Gang	1	..	9	19.00
1839	NEMA grounded Recp. 2-gang	1	..	15	37.00
1849	NEMA Grounded 3-gang	1	..	21	55.00

T & B RECEPTACLES

Nine styles of receptacles match almost any plug-in requirement. Any receptacle will install in any floor box. To install receptacle, drop in and twist. No separate mounting plate required.

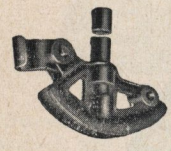
Cat. No.	Description	List Price, Each
1666	T Slot—2 wire	$2.20
1667	"Twist-Lock"—2 wire	3.80
1669	Three wire—20 amp.	4.20
1670	"Twist-Lock"—3 wire	4.00
1671	Three wire—grounded 20 amp.	4.20
1672	"Twist-Lock"—3 wire	4.00
1673	Three wire	3.80
1674	Three wire—grounded polarized	3.80
1675	NEMA—grounded	3.80

Standard Package prices apply to orders for assorted floor boxes, parts and accessories amounting to $60.00 net value or more.

T & B TOOLS FOR EMT

(Thinwall Conduit)

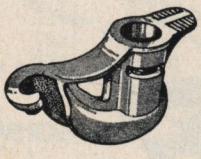
BENDERS FOR EMT



Forms a perfectly smooth round raceway for the conductors in any type of curve. Will also bend the next smaller size of standard rigid conduit, as noted below.

Cat. No.	Size	Std. Pkg.	Pkg. Wt.	Price Each
4195	½-inch Bender	1	2½	$7.38
4196	¾-inch Bender	1	4	12.50
4197	1 -inch Bender	1	7	24.25

HICKEY TYPE BENDERS



Cat. No.	Size Inch	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
4185	½	1	2	$7.25
4186	¾	1	3½	10.00

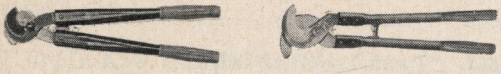
WRENCH AND REAMER FOR E.M.T.



A combination tool, extremely handy for all ½-inch and ¾-inch E.M.T. installations. The same tool tightens the glands on couplings and connectors, removes burrs from tubing, and reams edge of conduit. Drop-forged steel, heat-treated and tempered. Price, No. 33.....each $3.38

T & B CABLE CUTTERS

CUTS ALUMINUM or COPPER CABLE BARE or INSULATED



Patented

T & B Cable Cutters No. 364 and No. 365 are the first convenient, practical tools for cutting cables to exactly the right length, without jagged ridges across center, without burring strands or deformation of cable.

Designed to cut copper or aluminum cables. Should not be used to cut steel cable, ACSR, nor Copperweld.

Color is black with yellow plastic grips, tubular handles. Cutting blades: forged, hardened steel, with ⅛-inch overlap to permit repeated sharpening. Opening of handles: No. 364 takes cable sizes up to 4/0, insulation sizes up to 1". No. 365 takes cable sizes up to 500 MCM, insulation sizes up to 1½" O.D.

Cat. No.	Length Overall	Wt. Lbs. Each	Std. Pkg.	Price Each
364	20¾	3	1	$30.00
365	23¼	5½	1	45.00

T & B FITTINGS FOR EMT

Approved by Underwriters Laboratories

(Thinwall Conduit)

T & B MALLEABLE IRON EMT STRAPS



A one hole support made of malleable iron, designed specially for a snug fit on the E.M.T. ⅜ in. size made of steel.

Cat. No.	Size Inches	Open Inches	Closed Inches	Unit Pkg.	Std. Pkg.	Price Per 100
4175	⅜	500 3	$13.75	4179 1¼	100 18	$19.00
4176	½	500 5	6.50	4180 1½	50 26	30.00
4177	¾	500 7	10.25	4181 2	25 48	42.50
4178	1	100 9	15.00	....	... ..	.....

STEEL PIPE STRAPS

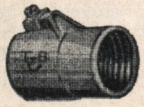
For Thinwall Conduit (E.M.T.)



Cat. No.	Size In.	Unit Quan.	Std. Pkg.	Price Per 100
4159	½	100	500	$6.25
4160	¾	50	500	9.75
4161	1	50	100	14.25

T & B CONDUIT FITTINGS

TITE-BITE® COMBINATION COUPLINGS



The Tite-Bite grip holds the flexible conduit securely and is vibration proof. The one-piece design cannot pull apart.

For Connecting Flexible Conduit and Standard Threaded Rigid Conduit

Cat. No.	Size Inches	Unit Quan.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
440	½	10	50	26	$ 77.50
441	¾	10	50	30	105.00
442	1	5	25	52	147.50
443	1¼	5	25	72	255.00
444	1½	5	25	112	375.00
445	2	5	10	300	532.50
446	2½	5	10	320	1175.00
447	3	2	5	400	1625.00

PANEL CONNECTOR EXTENSIONS



Can be used with any Connector or other fitting having male thread.

Makes any Connector a "Panel" Connector.

Cat. No.	Size Inches	Unit Quan.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
1440	½	25	50	14	$ 80.00
1441	¾	25	50	18	115.00
1442	1	10	25	28	175.00
1443	1¼	10	25	32	337.50
1444	1½	10	25	48	475.00
1445	2	5	10	70	600.00
1446	2½	5	10	90	975.00

T & B RIGID CONDUIT FITTINGS

T & B REDUCING WASHERS

Underwriters Laboratories Approved



T & B Reducing Washers are designed to reduce the size of knockouts in outlet boxes.

Made of steel and galvanized.

Patented

Cat. No.	Size, Inches K.O.		Conduit	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
3700	¾	to	⅜	250	500	1½	$4.38
3701	¾	to	½	250	500	1½	3.75
3702	1	to	⅜	125	250	1½	8.00
3703	1	to	½	125	250	2	6.50
3704	1	to	¾	125	250	2	6.50
3705	1¼	to	⅜	125	250	4	12.25
3706	1¼	to	½	125	250	2½	12.25
3707	1¼	to	¾	125	250	3	10.50
3708	1¼	to	1	125	250	6	10.50
3709	1½	to	⅜	50	100	6	14.75
3710	1½	to	½	50	100	6	14.75
3711	1½	to	¾	50	100	6	14.75
3712	1½	to	1	50	100	4	12.25
3713	1½	to	1¼	50	100	4	12.25
3714	2	to	½	50	100	9	19.25
3715	2	to	¾	50	100	9	19.25
3716	2	to	1	50	100	8	15.75
3717	2	to	1¼	50	100	6	15.75
3718	2	to	1½	50	100	6	15.75

T & B PUSH PENNIES



Protect against grout, water and dirt. These are flexible, reusable Polyethylene, specifically designed to fit all T&B Fittings and Standard Conduit.

Nom. Size Inches	Cat. No.	Std. Pkg.	Unit Quan.	Price Per 100
½	1570	2500	100	$7.00
¾	1571	1000	100	7.50
1	1572	500	50	8.50
1¼	1573	200	50	14.00
1½	1574	100	25	25.00
2	1575	100	25	36.00

T & B PENNIES



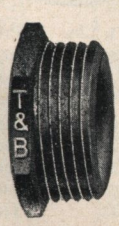
Slip them inside the bushing and when the job is done, unscrew the bushing and the penny drops out.

Cat. No.	Size Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
815	½	500	1000	½	$4.00
816	¾	250	500	½	4.75
817	1	125	250	1	8.00
818	1¼	125	250	1	16.50
819	1½	50	100	2½	20.63
820	2	50	100	4	23.75
821	2½	50	100	5	33.00
822	3	50	100	8	43.75
823	3½	50	100	10	57.50
824	4	25	100	13	75.00

T & B FEMALE CONDUIT REDUCERS

Underwriters Laboratories Approved

Designed to adapt an outlet to smaller conduit.

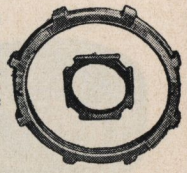


Cat. No.	Size In.			Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
1250	¾	—	½	50	100	9	$50.00
1261	1	—	½	25	100	15	70.00
1251	1	—	¾	25	100	14	70.00
1262	1¼	—	½	25	50	31	160.00
1263	1¼	—	¾	25	50	28	160.00
1252	1¼	—	1	25	50	22	160.00
1253	1½	—	1¼	25	50	22	225.00
1254	2	—	1½	10	25	60	412.50
1255	2½	—	2	10	25	76	750.00
1256	3	—	2½	10	25	140	1025.00
1257	3½	—	3	5	10	140	1650.00
1258	4	—	3½	5	10	200	2065.00

T & B RIGID CONDUIT FITTINGS

Underwriters Laboratories Approved

T & B LOCKNUTS



Sizes ⅜- to 2-inch inclusive are made of steel and are notched. Sizes 2½ to 6-inch inclusive are made of malleable iron, extra heavy, not notched but ribbed.

Cat. No.	Size In.	Std. Pkg.	Price Per 100	Cat. No.	Size In.	Std. Pkg.	Price Per 100
140	⅜	1000	$5.75	147	2½	30	$42.75
141	½	2500	3.50	148	3	25	65.63
142	¾	1000	4.00	149	3½	25	127.50
143	1	500	7.25	150	4	25	162.50
144	1¼	200	9.38	152	5	10	360.00
145	1½	100	11.50	153	6	10	687.50
146	2	50	23.00	...	...	..	.....

T & B INSULINER® SLEEVES

Listed by Underwriters' Laboratories

Can be used in any raceway outlet. Overlapping ends automatically adjust Insuliner sleeve to normal variations of conduit diameters — either standard heavywall, or thinwall conduit (E.M.T.).

The smoothly rounded mouth covers the bushing and long skirt shields end of conduit.



Cat. No.	Cond. Size, In.	Unit Pkg.	Std. Pkg.	Price Per 100
422	½	25	100	$20.63
423	¾	25	100	30.00
424	1	25	100	34.38
425	1¼	20	40	43.75
426	1½	20	40	50.00
427	2	15	30	57.50
428	2½	15	30	100.00
429	3	5	25	132.50
430	3½	5	25	182.50
431	4	5	20	232.50
433	5	2	10	550.00
434	6	1	5	912.50

T & B KNOCKOUT PLUGS

Embossed to interlock and center in the knockout. Patented fastener holds by squeezing the Tee Head with pliers to tighten.

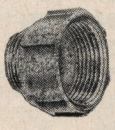
Patented



Cat. No.	Conduit Size	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
1451	½	1000	2	$7.50
1452	¾	1000	2½	9.00
1453	1	1000	...	12.00
1454	1¼	500	...	16.00
1455	1½	500	...	26.00
1456	2	500	...	30.00

T & B MALE CONDUIT ENLARGERS

For securing the next larger size of conduit in a knockout hole.



Cat. No.	Size Inches			Unit Pkg.	Std. Pkg.	Price Per 100
1245	½	—	¾	25	100	$40.00
1246	¾	—	1	25	50	70.00
1244	1	—	1¼	5	50	160.00
1247	1¼	—	1½	5	25	400.00

T & B RIGID CONDUIT FITTINGS

Underwriters Laboratories Approved

T & B CONDUIT BUSHINGS



Smoothly rounded shoulder covers end of conduit; broad base covers knockout hole. High ribs make tightening easy with fingers or with wrench.

Packed in neat, strong boxes, marked to show contents.

Cat. No.	Size In.	Std. Pkg.	Price Per 100	Cat. No.	Size In.	Std. Pkg.	Price Per 100
121	⅜	1000	$13.13	128	2½	30	$92.50
122	½	2500	6.25	129	3	25	115.00
123	¾	1000	10.00	130	3½	25	235.00
124	1	500	16.00	131	4	25	287.50
125	1¼	200	17.50	133	5	10	575.00
126	1½	100	23.13	134	6	10	1050.00
127	2	50	50.00	...	...	..	.....

T & B CAPPED BUSHINGS



Make a workmanlike seal against dirt and mischief. Steel cap is crimped to inner surface of bushing. Quickly removable with a screw driver.

Cat. No.	Size Inches	Unit Quan.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
1460	½	100	2500	2½	$12.00
1461	¾	100	1000	4	13.75
1462	1	50	500	9	20.63
1463	1¼	25	200	12½	33.00
1464	1½	10	100	16	40.00
1465	2	10	50	20	75.00

T & B INSULATED METALLIC BUSHINGS



Insulated Metallic Bushings line the ends of conduits and prevent cable abrasion and accidental grounds. Insulator is extremely tough with a smooth resilient surface . . . unaffected by common acids, solvents, moisture or fumes.

Cat. No.	Size	Unit Quan.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
1222	½	50	100	3	$30.00
1223	¾	25	50	6	47.50
1224	1	5	20	10	70.00
1225	1¼	5	20	10	97.50
1226	1½	5	20	15	125.00
1227	2	5	10	20	165.00
1228	2½	5	10	20	262.50
1229	3	1	5	60	385.00
1230	3½	1	5	60	482.50
1231	4	1	5	60	625.00
586	5	..	1	100	1250.00
587	6	..	1	100	1800.00

T & B RIGID CONDUIT FITTINGS

Underwriters Laboratories Approved

T & B INSULATING BUSHINGS

For Standard Rigid Conduit

Meet NEC requirements for protection against damage to cable sheath or wire insulation from burred or unevenly cut conduit. Takes minimum space in a cabinet or pull box. These bushings are constructed wholly of cellulose acetate butyrate and provide a smoothly rounded surface where wiring emerges from conduit.

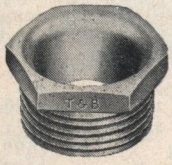


Pat. Pend.

Cat. No.	Size Inches	Unit Quan.	Std. Pkg.	Wgt Lbs. Per 100	Price Per 100
222	½	100	400	8	$ 6.00
223	¾	100	400	10	9.00
224	1	50	200	20	13.75
225	1¼	25	100	30	20.75
226	1½	25	100	33	27.50
227	2	25	50	55	50.00
228	2½	10	20	85	87.50
229	3	10	20	100	95.00
230	3½	5	10	130	118.00
231	4	5	10	150	142.50
233	5	—	2	210	310.00
234	6	—	2	250	595.00

CHASE® NIPPLES

To connect conduit to a box with an ordinary ccupling. Provides more wiring space and allows box to be removed without disturbing conduit. A Chase Nipple and a locknut will hold two boxes together, back to back.

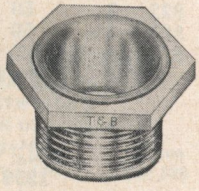


Cat. No.	Size In.	Std. Pkg.	Price Per 100	Cat. No.	Size In.	Std. Pkg.	Price Per 100
840	¼	1000	$28.00	847	2	50	$100.00
841	⅜	1000	28.00	848	2½	20	160.00
842	½	500	12.50	849	3	10	235.00
843	¾	200	15.00	850	3½	5	500.00
844	1	100	28.75	851	4	5	825.00
845	1¼	100	46.75	853	5	5	2200.00
846	1½	50	63.25	...	...	..	.....

INSULATED CHASE® NIPPLES

Insulated Male Bushing

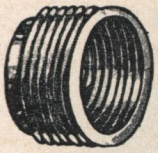
Because of the nationwide accent on safety, the trend is toward insulated fittings in all locations. Insulated chase nipples are standard fittings today. Extremely tough they are unaffected by common acids, solvents, moisture or fumes.



Cat. No.	Size Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
1942	½	25	100	4	$ 30.00
1943	¾	25	100	7	35.00
1944	1	25	100	13	40.00
1945	1¼	10	50	21	70.00
1946	1½	10	50	29	90.00
1947	2	10	50	52	180.00
1948	2½	5	20	83	240.00
1949	3	5	20	125	350.00

T & B RIGID CONDUIT FITTINGS

Underwriters Laboratories Approved



THREADED REDUCERS

These reducers screw into the hubs of tubelets to receive smaller size conduit.

Cat. No.	Size Inches	Unit Quan.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
600	½— ⅛	50	100	3	$42.50
601	¾— ½	50	100	5	27.50
602	1 — ½	25	50	14	50.00
603	1 — ¾	25	50	18	50.00
604	1¼— ½	25	50	30	90.00
605	1¼— ¾	25	50	28	90.00
606	1¼—1	25	50	16	90.00
607	1½— ½	25	50	42	130.00
608	1½— ¾	25	50	34	130.00
609	1½—1	25	50	32	130.00
610	1½—1¼	25	50	16	130.00
611	2 — ½	10	25	76	207.50
612	2 — ¾	10	25	72	207.50
613	2 —1	10	25	64	175.00
614	2 —1¼	10	25	52	175.00
615	2 —1½	10	25	40	175.00

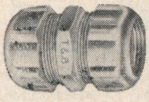
ERICKSON® COUPLINGS

With an Erickson Coupling a conduit run may be completed when neither conduit can be turned. Or a run with an Erickson Coupling may be broken without taking down the whole run.

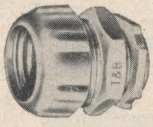


Cat. No.	Size Inches	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
674	⅜	100	12	$137.50
675	½	100	24	68.75
676	¾	50	34	88.00
677	1	25	56	165.00
678	1¼	25	96	330.00
679	1½	25	112	425.00
680	2	20	175	862.50
681	2½	10	360	1825.00
682	3	10	380	2850.00
683	3½	5	500	4500.00
684	4	5	580	5125.00
686	5	2	1000	10937.50

T & B THREADLESS COUPLINGS AND CONNECTORS



Coupling



Connector

Couplings

Cat. No.	Size Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
8120	½	50	100	22	$102.50
8220	¾	25	50	32	150.00
8320	1	5	25	52	240.00
8420	1¼	5	25	112	362.50
8520	1	2	10	150	447.50
8620	2	1	5	480	1037.50
8720	2½	1	5	480	2350.00
8820	3	1	5	700	3125.00
8850	3½	1	5	800	4000.00
8970	4	1	5	900	5125.00

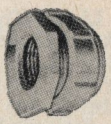
Connectors

8121	½	25	100	17	67.50
8221	¾	25	50	26	110.00
8321	1	5	25	44	145.00
8421	1¼	5	25	84	265.00
8521	1½	2	10	110	367.50
8621	2	1	5	180	725.00
8721	2½	1	5	360	1875.00
8821	3	1	5	500	2250.00
8851	3½	1	5	600	2700.00
8971	4	1	5	630	3375.00

T & B RIGID CONDUIT FITTINGS

Underwriters Laboratories Approved

T & B CONDUIT COUPLINGS

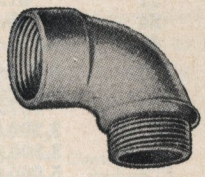


No. 1410

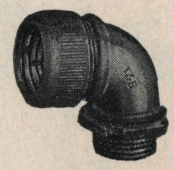
These couplings are so designed that when assembled with conduit bodies, they constitute a complete body.

Cat. No.	Size Inches	Unit Quan.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
1410	½	25	100	10	$52.50
1420	¾	25	100	16	82.50

T & B THREADED AND THREADLESS SHORT ELBOWS



No. 4250



No. 8030

T & B Short Elbows (90° Angle Adapters) are well bushed, with clean machine-cut threads. Malleable iron. Tabolite galvanized inside and out. Conduit sizes: ½-inch to 2-inch.

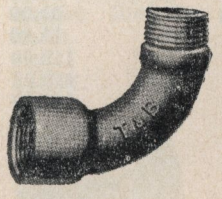
Short Elbows (90° Adapters)

Cat. No.	Size Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
4250	½	25	50	20	$63.75
4251	¾	25	50	30	87.50
4252	1	10	25	56	135.00
4253	1¼	10	25	92	262.50
4254	1½	10	25	108	382.50
4255	2	5	10	190	670.00

Threadless Short Elbow for Standard Rigid Conduit

8030	½	25	50	24	$106.25
8031	¾	25	50	34	172.50
8032	1	5	25	68	380.00
8033	1¼	2	10	130	575.00
8034	1½	2	10	160	687.50
8035	2	2	10	230	1037.50

T & B BUSHED ELBOWS



Handy wherever a conduit run ends in a sharp turn. Smoothly rounded shoulders protect insulation. Sharp, machine-cut threads — male on one end; female on the other. Malleable iron thoroughly protected with Tabolite galvanizing.

Cat. No.	Size	Radius In.	Offset In.	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
460	½	1⅛	1⅛	10	50	20	$85.00
461	¾	1½	1½	10	50	42	117.50
462	1	1 13/16	1 13/16	5	25	84	252.50
463	1¼	2¼	2¼	5	10	150	380.00

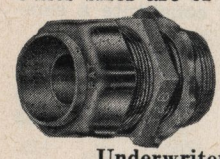
T & B LIQUID-TIGHT FLEXIBLE CONDUIT CONNECTORS

Meet J.I.C. Requirements

T & B ENGINEERED

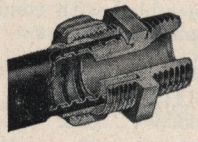
T & B Fittings for Liquid-Tight Flexible Conduit mate with any conduit spiral, and do not have to be taken apart for installation.

End of fitting facing the junction box has sufficient length to accommodate double locknuts used with sheet metal boxes. The fitting's body is die cast from high-strength zinc alloy for the three smallest sizes. Other sizes are of malleable iron.



Patented

STRAIGHT TYPE



Underwriters Laboratories Approved

Cat. No.	Conduit Size	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
5231	⅜	100	13	$87.50
5232	½	100	17	87.50
5233	¾	50	24	125.00
5234	1	25	41	175.00
5235	1¼	25	84	300.00
5236	1½	10	104	425.00
5237	2	5	160	787.50
5238	2½	5	312	3,200.00
5239	3	5	375	3,800.00
5240	4	5	612	5,000.00



ANGLE TYPE



Underwriters Laboratories Approved

45 Degree Cat. No.	90 Degree Cat. No.	Conduit Size	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
5241	5251	⅜	50	18	$137.50
5242	5252	½	50	28	137.50
5243	5253	¾	50	40	200.00
5244	5254	1	25	68	400.00
5245	5255	1¼	25	100	612.00
5246	5256	1½	10	160	750.00
5247	5257	2	5	230	1100.00
5248	5258	2½	5	600	4500.00
5249	5259	3	5	875	5100.00
5250	5260	4	5	1225	6400.00

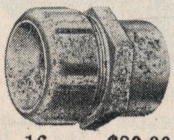


SEALING O-RINGS
For Liquid-Tight Seal Between Connector and Knockout Box

Cat. No.	Conduit Size	Unit Quan.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
5261	⅜	50	100	.4	$18.75
5262	½	50	100	.43	18.75
5263	¾	25	50	.56	21.25
5264	1	25	50	.63	30.00
5265	1¼	5	25	3.9	50.00
5266	1½	5	25	4.0	60.00
5267	2	5	25	4.1	75.00
5268	2½	1	5	5	150.00
5269	3	1	5	6.4	250.00
5270	4	1	5	8.4	330.00

Female Hub Connectors For Liquid Tight Conduit

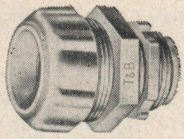
Patent Pending



5271	⅜"	10	50	16	$80.00
5272	½"	10	50	22	80.00
5273	¾"	5	25	32	115.00
5274	1"	5	15	42	170.00
5275	1¼"	5	15	72	275.00

INSULATED LIQUID TIGHT CONNECTORS

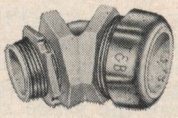
STRAIGHT



No. 5331

Cat. No.	Conduit Size	Unit Quan.	Std. Pkg.	Wt. lbs. Per 100	Price Per 100
5331	⅜"	25	100	13	
5332	½"	25	100	17	
5333	¾"	25	50	24	
5334	1"	5	25	41	
5335	1¼"	5	25	84	
5336	1½"	2	10	105	
5337	2"	1	5	160	
5338	2½"	1	5	312	
5339	3"	1	5	375	
5340	4"	1	5	612	

45° ANGLE



5341	⅜"	25	50	18	
5342	½"	25	50	28	
5343	¾"	25	50	40	
5344	1"	5	25	68	
5345	1¼"	5	25	100	
5346	1½"	2	10	160	
5347	2"	1	5	230	
5348	2½"	1	5	600	
5349	3"	1	5	875	
5350	4"	1	5	1225	

90° ANGLE

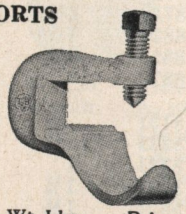


5351	⅜"	25	50	18	
5352	½"	25	50	28	
5353	¾"	25	50	40	
5354	1"	5	25	68	
5355	1¼"	5	25	100	
5356	1½"	2	10	160	
5357	2"	1	5	230	
5358	2½"	1	5	862	
5359	3"	1	5	1287	
5360	4"	1	5	2181	

T & B RIGID CONDUIT FITTINGS

CONDUIT SUPPORTS

These supports will fit any beam flange up to ⅝-inch thick. The pointed set screw bites into the beam.

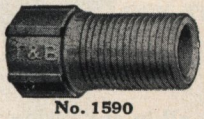


Cat. No.	Size for Conduit, Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
690	½	10	100	40	$162.50
691	¾	10	100	43	180.00
692	1	10	50	55	192.50
693	1¼	10	50	60	262.50

T & B RIGID CONDUIT FITTINGS

T & B FIXTURE EXTENSIONS

Listed by Underwriters' Laboratories



No. 1590

Machine turned from steel with long vertical knurl for a good finger grip. Sharp ⅜-inch thread. Tabolite finish.

Cat. No.	Size	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 1000
1590	1" long	500	1000	56	$93.75
1591	1⅜" long	500	1000	74	113.75
1592	1 11/16" long	500	1000	34	110.00

MINERAL INSULATED CABLE CONNECTORS

Furnished with 3 contact prongs in flat position. When cable is inserted into connector, prongs are bent inward making grounding contact.

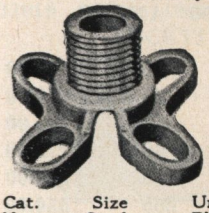
The continuity of ground is maintained by means of three set-screws. Mechanical security is obtained through the compression of silicone rubber bushing around the cable. The hub is designed to accommodate the screw-on part furnished by the cable manufacturer.

Cat. No.	For Cable Diameters	Size Inches	Wt. Lbs. Per 100	Net Price Per 100
2659	.309, .324	½	20	$100.00
2660	.340, .355	½	20	$100.00
2661	.371, .387, .402	½	20	100.00
2665	.418, .434, .449	¾	18	100.00
2666	.465, .480, .469	¾	18	100.00
2667	.512, .527, .543, .559	¾	18	100.00
2670	.590, .621	1	22	120.00
2671	.637, .684	1	22	120.00
2672	.699, .730	1	22	120.00

Standard package quantity, 100 pcs. Unit quantity, 10 pcs.

T & B HICKEY FIXTURE STUD

Listed by Underwriters' Laboratories

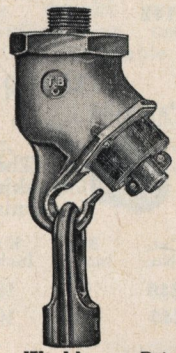


This Stud is of Malleable Iron, and is furnished in Tabolite. All four prongs have extra long slots to allow adjustment.

Cat. No.	Size Stud	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 1000	Price Per 1000
16	⅜	100	1000	76	$125.00

DISCONNECT HANGER ASSEMBLY

Listed Under Reexamination Service of Underwriters' Laboratories



These Hangers provide a safety disconnect for light and power circuits. Designed primarily for Mercury Vapor Lighting Units, they can be used equally well with other types of industrial lighting fixtures.

Complete Assembly

Cat. No.	Std. Pkg.	Wt. Lbs. Per 100	Price Each
6140	10	100	$13.75

Separate Parts

Cat. No.	Thread Size	Description	Std. Pkg.	Wt. Lbs. Per 100	Price Each
		Hooks for Use with Loops Listed Below			
6150	½"	2-w. receptacle	10	90	$12.50
6151	¾"	2-w. receptacle	10	95	13.75
6152	½"	3-w. receptacle	10	115	26.25
6153	¾"	3-w. receptacle	10	120	27.50
		Loops for Use with Hooks Listed Above			
785	½"	Non-cushion	10	20	1.50
786	¾"	Non-cushion	10	30	2.50
805	½"	3- 6 lbs. cushion....	10	45	9.25
806	½"	6-12 lbs. cushion	10	45	10.00
807	½"	12-24 lbs. cushion	10	45	10.75

T & B RIGID CONDUIT TOOLS

T & B LAKIN® HICKEY

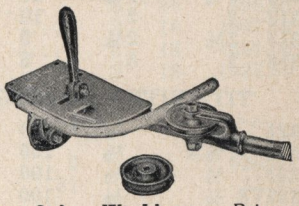


Shank is extra long, has bushed hole designed to slip over end of conduit for making short bends at end of conduit.

Cat. No.	Size Inch	Std. Pkg.	Price Each	Cat. No.	Size Inch	Std. Pkg.	Price Each
335	½	10	$5.88	337	1	2	$16.25
336*	¾	10	9.35				

*Can also be used to bend ½-inch pipe.

T & B ELBOW FORMER



This Elbow Former makes standard elbows, accurately and easily, exactly where they are needed.

Cat. No.	Conduit Size Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Each
339	½ and ¾	1	1	3800	$255.00

FISH TAPE WITH BALLS



Standard coils are 100 and 200 feet long. Furnished in 50 and 150 foot lengths when requested.

Cat. No.	Size Inches	Wt. Lbs. 100 Ft.	Price Per 100 Ft.	Cat. No.	Size Inches	Wt. Lbs. 1000 Ft.	Price Per 100 Ft.
3600	⅛ x .030	20	$5.75	3602	5/16 x .060	40	$9.00
3601	⅛ x .060	30	8.50	3603	¼ x .060	60	13.25

T & B FISH TAPE BALLS



Fit any standard tape.

Cat. No.	Size Inches	Unit Quan.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
3615	⅛ x .060	10	50	3	$125.00
3616	5/16 x .060	10	50	5	150.00
3617	½ x .060	10	50	6	150.00

T & B RIGID CONDUIT FITTINGS

T & B MALLEABLE IRON PIPE STRAPS



Designed to fit each size of conduit snugly. High reinforcing ribs on each size increase the strength, reduce the weight. Hot dip galvanized finish.

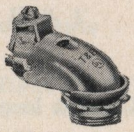
Cat. No.	Size Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
1275	⅜	100	500	5	$11.25
1276	½	100	500	7	10.00
1277	¾	50	500	9	13.75
1278	1½	50	100	15	20.00
1279	1¼	25	100	22	33.50
1280	1½	25	50	28	40.00
1281	2	10	25	80	61.00
1282	2½	10	25	116	125.00
1283	3	10	25	136	175.00
1284	3½	5	10	200	250.00
1285	4	5	10	260	575.00
1287	5	2	5	500	1500.00

T & B CONNECTORS

Underwriters Laboratories Approved



Patented



STRAIGHT 90° ANGLE

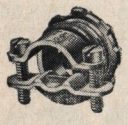
TITE-BITE® STRAIGHT CONNECTORS

Cat. No.	Trade Size Inch	K. O. Size Inch	Std. Pkg.	Unit Quan.	Wgt. Per 100	Net Cost Per 100
300	⅜	½	1000	100	7	**$ 16.00**
301	⅜ A	½	100	50	14	**37.00**
302	½	½	100	50	14	**45.00**
303	¾ S	¾	100	50	21	**45.00**
304	¾	¾	100	25	22	**70.00**
305	1S	1	25	10	32	**70.00**
306	1	1	25	10	40	**105.00**
308	1¼	1¼	10	5	60	**105.00**
310	1½	1½	10	5	100	**210.00**
312	2	2	10	5	120	**315.00**
314	2½	2½	5	2	200	**500.00**
316	3	3	5	2	260	**750.00**

TITE-BITE® 90° ANGLE CONNECTORS

321	⅜	½	100	50	13	**$ 45.00**
322	⅜ A	½	100	50	25	**70.00**
323	½	½	100	25	27	**70.00**
323V8	½	½	100	25	25	**100.00**
324	¾ S	¾	50	25	32	**100.00**
325	¾	¾	50	25	34	**175.00**
326S	1S	1	25	10	64	**175.00**
326	1	1	25	10	60	**325.00**
327	1¼	1¼	10	5	110	**325.00**
328	1½	1½	10	5	170	**525.00**
329	2	2	5	2	280	**725.00**
330	2½	2½	5	2	500	**2000.00**
331	3	3	5	2	800	**2800.00**

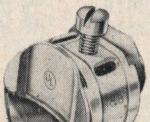
TWO-SCREW CONNECTORS



Precision made. All edges are rounded. No sharp burrs to harm conductors. The screws thread into the saddle, not the body.

Cat. No.	Size Inches	Opening Max.	Opening Min.	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
3302	⅜	.656	.250	100	1000	6	**$15.00**
3303	¾	.720	.450	25	100	17	**44.00**
3304	1	.950	.530	10	50	28	**60.50**
3305	1¼	1.250	.812	5	10	40	**92.50**

No. 2020 CONNECTOR



For non-metallic sheathed cable, 14W2, 14W3, 12W2, 12W3, 10W2, 10W3, also $\frac{7}{32}$, ¼ and ⅜-inch flexible fibre tubing.

Patented

Cat. No.	Size In.	Size K.O.	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
2020	⅜	½	100	1000	3½	**$11.88**

CABLE CLIPS



For Armored Cable—Made from galvanized round steel wire. Needle sharp points will stick even in hard wood when pushed in with fingers.

For Armored Cable

Cat. No.	Size Inches	Standard Package	Wt. Lbs. Per 100	Price Per 1000
90	⅜	10,000	13½	**$8.50**

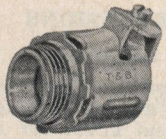
For Non-Metallic Sheathed Cable

91	⅜	10,000	12	7.75

T & B CONNECTORS

Underwriters Laboratories Approved

TM



Patented



STRAIGHT 90° ANGLE

Now, for the first time, an all-in-one fitting which incorporates both connector and insulating bushing in one integral unit. No separate insulating bushing needed.

The bright blue insulating liner completely covers the area inside the connector throat and provides a rounded burr-free passage for wiring.

INSULATED TITE-BITE® STRAIGHT CONNECTORS

Cat. No.	Size Inch	Std. Pkg.	Unit Quan.	Net Wgt. Per 100	Net Cost Per 100
3110	⅜	500	50	7	**$ 27.00**
3112	½	100	25	15	**40.00**
3115	¾	50	10	23	**50.00**
3117	1	25	5	45	**80.00**
3118	1¼	10	5	62	**125.00**
3119	1½	10	5	102	**225.00**
3120	2	5	1	130	**350.00**
3121	2½	5	1	230	**500.00**
3122	3	5	1	270	**775.00**

INSULATED TITE-BITE® 90° ANGLE CONNECTORS

3130	⅜	100	25	15	**$ 49.00**
3132	½	100	25	25	**75.00**
3135	¾	50	10	41	**105.00**
3137	1	25	5	62	**175.00**
3138	1¼	10	5	135	**325.00**
3139	1½	10	5	205	**550.00**
3140	2	5	1	280	**750.00**
3141	2½	5	1	430	**2150.00**
3142	3	5	1	580	**3000.00**

INCLINED SET SCREW CONNECTORS

Patented

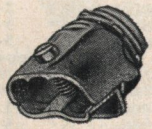


The screw is on the right hand side making it easy to tighten. Locknuts furnished without charge.

Cat. No.	Size Inches	K.O. Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
240	⅜	½	100	1000	6	**$13.75**
243	½	½	50	100	15	**30.00**

DUPLEX CONNECTOR

Designed to accommodate two armored or non-metallic cables in the same knockout saving labor, time and materials.



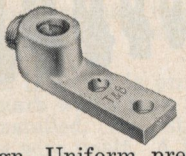
291	⅜	½	25	100	15	**$38.75**

T & B LOCK-TITE® LUGS AND CONNECTORS

Listed by Underwriters' Laboratories

LOCK-TITE LUGS



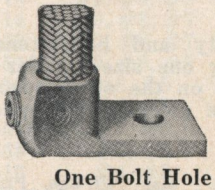


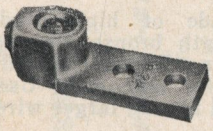
Each lug is one-piece design. Uniform pressure all around provides direct contact and high conductivity. Tests prove that Lock-Tite fittings make up tight, stay tight and run cooler than the cable.

One Bolt Hole Tongue

Cat. No.	Description	Unit Quan.	Std. Pkg.	Price Per 100	Use Key Wrench Cat. No.
31003	14 Sol. to 8 Sol.	20	100	$106.25	..
31005	8 to 6 Sol. or Str.	10	50	107.50	..
31007	4 Sol. to 1 Str.	10	50	135.00	30
31009	1 Sol. to 2/0	5	25	212.50	30
31011	2/0 to 4/0	5	25	290.00	30
31013	4/0 to 300	2	10	352.50	50
31015	300 to 500	2	10	562.00	50
31017	500 to 750	1	5	965.00	50
31019	750 to 1000	1	5	1125.00	50
	Two Bolt Hole Tongue				
32003	14 Sol. to 8 Sol.	10	50	$160.00	..
32005	8 Sol. to 4 Str.	10	50	180.00	..
32007	4 Sol. to 1 Str.	10	50	200.00	30
32009	1 Sol. to 2/0	5	25	252.50	30
32011	2/0 to 4/0	5	25	330.00	30
32013	4/0 to 300	2	10	417.50	50
32015	300 to 500	2	10	640.00	50
32017	500 to 750	1	5	967.50	50
32019	750 to 1000	1	5	1242.50	50

LOCKTITE LUGS—TYPE UAL





One Bolt Hole Tongue—Type UAL

31003UAL 31013UAL
31005UAL 31015UAL
31007UAL 31017UAL
41009UAL 31019UAL
31011UAL

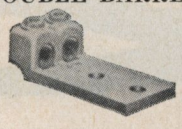
For key wrench number packaging, weight and price information use standard One Bolt Table

Two Bolt Hole Tongue—Type UAL

32003UAL 32013UAL
32005UAL 32015UAL
32007UAL 32017UAL
32009UAL 32019UAL
32011UAL

For key wrench number packaging, weight and price information use standard One Bolt Table

DOUBLE BARREL

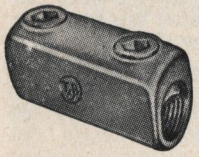


Cat. No.	Bolt Holes	Unit Quan.	Std. Pkg.	Price Per 100	Uses Key Wrench Cat. No.
32007-BD	2	2	10	$400.00	30
32009-BD	2	2	10	600.60	30
32011-BD	2	2	10	800.00	30
32013-BD	2	1	5	1000.00	50
32015-BD	2	1	5	1600.00	50
32017-BD	4	1	2	2600.00	50
32019-BD	4	1	2	3400.00	50

T & B LOCK-TITE® LUGS AND CONNECTORS

Listed by Underwriters' Laboratories

LOCK-TITE TWO-WAY CONNECTORS



Nine connectors splice all cables No. 14 to 1,000,000 CM. Each connector takes a wide range of cable sizes and all types of conductors. Quickly installed with key wrench.

Cat. No.	Cable Size	Unit Quan.	Std. Pkg.	Price Per 100
32503	14 Sol. to 8 Sol.	10	50	$150.00
32505	8 to 6 Sol. or Str.	5	25	170.00
32507	4 Sol. to.1 Str.	12	72	192.50
32509	1 Sol. to 2/0	6	36	290.00
32511	2/0 to 4/0	6	36	425.00
32513	4/0 to 300 MCM	6	36	590.00
32515	300 to 500 MCM	3	18	1007.50
32517	500 to 750 MCM	3	18	1637.50
32519	750 to 1000 MCM	3	18	1937.50

KEY WRENCH

Cat. No.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
30	1	9	$25.00
50	1	31	37.50

T & B LUG-IT® FOR STRANDED OR SOLID WIRE

Listed by Underwriters' Laboratories



Pat. Pend.

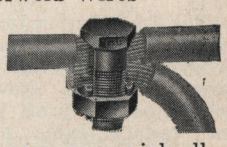
Double thickness at thread gives double thread strength and locking action. Serrated copper tongue gives high conductivity. Bronze body provides strength.

Cat. No.	Wire Range Min.	Wire Range Max.	Bolt Size	Unit Qty.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
35301	14	6	#10	200	1000	2½	$17.00
35401	8	2	¼	100	500	5	25.00
35501	4	2/0	¼	50	250	11	50.00
35601	1/0	4/0	⅜	10	50	22	117.00

T & B SPLIT BOLT

(Service Connector)

For Copper and Copperweld Wires



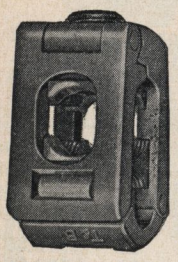
A service connector specially designed for tapping or splicing service wires and for making primary and secondary transformer connections.

Made of high strength Duronze, a special alloy known to be over 50 per cent stronger than hard copper or commercial bronze.

Cat. No.	Maximum Wire Size Stranded Copper	Maximum Wire Size Copperweld Type A	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
2T	10	...	100	2	$ 34.00
3T	8	...	100	3	36.50
4T	8	8A	100	7	41.25
5T	6	6A	100	9	50.00
6T	4	4A	100	11	70.00
7T	2	...	100	13	75.00
8T	1/0	2A	50	19	102.50
9T	2/0	...	25	26	167.50
10T	4/0	...	25	35	282.50
11T	350 MCM	...	1	75	537.50
12T	500 MCM	...	1	100	700.00
13T	750 MCM	...	1	150	1175.00
14T	1000 MCM	...	1	300	1625.00

T & B LOCK-TITE® TEE-PARALLEL TAPS

Listed by Underwriters' Laboratories



These fittings can be used as either a tee or parallel tap two-way connector, or elbow. Each tap has a wide range of cable sizes. The one-piece design — no detachable parts — allows easy assembly to main and branch.

In this listing, the Main indicates the size of cable running through the tap, the Branch the size of cable to be connected to the main.

Now made of Hi-Strength Silicon Bronze.

Cat. No.	Cable Size — Main	Cable Size — Branch	Unit Quan.	Price Per 100
35003	1/0 to 4/0	2 Sol. & Str. to 1	2	**$345.00**
35005	1/0 to 4/0	1/0 to 4/10	2	**402.50**
35007	4/0 to 300†	2 Sol. & Str. to 1/0	2	**402.50**
35009	4/0 to 300†	2/0 to 300 MCM	2	**575.00**
35011	300 to 500†	2 Sol. & Str. to 3/0	2	**675.00**
35013	300 to 500†	4/0 to 500 MCM	1	**862.50**
35015	500 to 750†	2 Sol. & Str. to 3/0	1	**1037.50**
35017	500 to 750†	4/0 to 500 MCM	1	**1325.00**
35019*	500 to 750†	500 to 750 MCM	1	**1612.50**
35021	750 to 1000†	2 Sol. & Str. to 3/0	1	**1050.00**
35023	750 to 1000†	4/0 to 500 MCM	1	**1287.50**
35025*	750 to 1000†	500 to 750 MCM	1	**1475.00**
35027*	750 to 1000†	750 to 1000 MCM	1	**1550.00**

*These sizes supplied with two clamping screws instead of as illustrated.

†MCM.

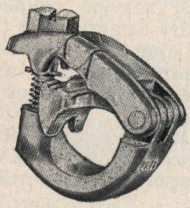
Standard package quantities: Cable sizes 1/0 to 300 MCM, 10; 300 to 1000, 5.

T & B HINJON® JUNIOR TEE-PARALLEL TAP

For Mains No. 8 to 1000 MCM—For Small Wire Branches No. 14 to No. 1

Listed by Underwriters' Laboratories

The T&B Hinjon Junior Tap is compact, small and easy to tape. Twelve fittings take the entire range of sizes shown above. Self-adjusting jaws grip main and branch cable all around providing a perfect electrical and mechanical connection. To make a tee tap, just bend the branch.

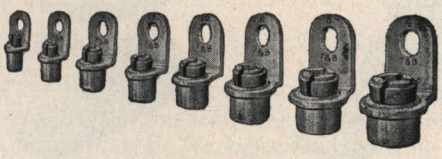


Cat. No.	Cable Size — Main	Cable Size — Branch	Std. Pkg.	Price Per 100
35107	8 to No. 4	14 to 8	25	**$181.25**
35108	8 to No. 4	8 to 4	25	**195.00**
35109	4 to 1/0	14 to 4	25	**215.00**
35110	4 to 1/0	4 to 1	25	**257.50**
35111	1/0 to 4/0	14 to 4	10	**302.50**
35112	1/0 to 4/0	8 to 1	10	**325.00**
35113	4/0 to 300 MCM	14 to 4	10	**365.00**
35114	4/0 to 300 MCM	8 to 1	10	**397.00**
35115	300 to 500 MCM	14 to 4	10	**500.00**
35116	300 to 500 MCM	8 to 1	10	**605.00**
35118	500 to 750 MCM	14 to 1	5	**762.50**
35120	750 to 1000 MCM	14 to 1	5	**1050.00**

T & B WEDGE-ON® DEVICES

T & B "WEDGE-ON" LUGS

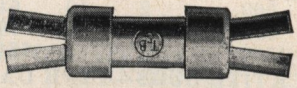
Listed by Underwriters' Laboratories



Cat. No.	Wire Size	Carton	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
18L100	22 to 18 S. & S.	100	200	4½	**$20.00**
16L100	16 S. & S.	100	200	6½	**20.00**
14L100	14 S. & S.	100	200	8	**20.00**
12L100	12 S. & S.	100	200	10	**22.50**
10L100	10 S. & S.	100	200	11	**26.25**
9L101	(See Note)	100	200	15	**30.00**
8L100	8 S. & S.	50	200	21	**32.50**
6L100	6 Stranded	50	200	28	**37.50**
6SL100	6 Solid	50	200	28	**37.50**
4L100	4 Stranded	50	200	32	**42.50**
4SL100	4 Solid	50	200	32	**42.50**

Terminals of special sizes and shapes can be furnished in lots of 5,000 pcs. No. 9L101 takes 19 strands of No. 22 control wire.

T & B "WEDGE-ON" WIRE SPLICERS

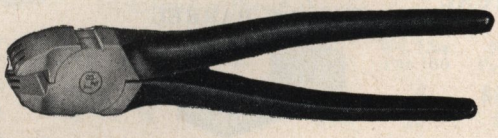


Made of high conductivity and high tensile strength bronze. For splicing one size smaller or larger wire on one end than on the other specify size for both ends. Use same price as the splicer listed for the larger wire size.

Cat. No.	Size S.&S.	Wt. Lbs. Per 100	Price Per 100	Cat. No.	Size S.&S.	Wt. Lbs. Per 100	Price Per 100
16C	16	2½	**$23.75**	**9C**	9	2	**$47.50**
14C	14	2½	**23.75**	**8C**	8	4½	**47.50**
12C	12	2½	**27.50**	**6C**	6	6	**55.00**
10C	10	2	**27.50**	**4C**	4	6	**55.00**

Standard package, 100.

WEDGE-ON TOOL

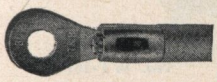


For use in installing T&B Wedge-On Lugs; Splicers.

Cat. No.	For Terminal Sizes	Std. Pkg.	Wt. Lbs. Each	Price Each
21000	8 to 16, Incl.....	1	1½	**$12.50**
21001	8, 6 and 4.....	1	1½	**12.50**
21004	22, 18, 16 and 14.....	1	1½	**12.50**

T & B STA-KON® PRESSURE TERMINALS—

Approved by Underwriters Laboratories



There is a variety of Sta-Kon terminals made for each wire size from #22 to 250 M.C.M. Commercial AWG.

A secure mechanical grip on the wire is produced by the pressure of the stake-mark which runs parallel to the strands. Once installed, the Sta-Kon terminal becomes a part of the wire itself. A highly conductive electrical connection is the result.

The Sta-Kon terminal is made of high conductivity electrolytic copper and the complete terminal is hot-tinned.

Standard Series—For use with Stock Tool No. WT-111M

Cat. No.	Wire Size (Com'l AWG)	Std. Pkg.	Unit Quan.	Bolt Size	Price Per 100
A18-6	#22 to #18	1000	100	#6, #4	$4.63
A18-8	#22 to #18	500	100	#8	4.63
A18-10	#22 to #18	1000	100	#10	4.63
A18-14	#22 to #18	500	100	¼	4.63
B14-6	#20, #14	2000	100	#6, #4	4.63
B14-8	#20, #14	2000	100	#8	4.63
B14-10	#20, #14	2000	100	#10	4.63
B14-14	#20, #14	2000	100	¼	4.63
C10-6	#16, #10	500	50	#6, #4	6.25
C10-8	#16, #10	500	50	#8	6.25
C10-10	#16, #10	1000	50	#10	6.25
C10-14	#16, #10	1000	50	¼	6.25
C10-516	#16, #10	1000	50	5/16	6.25
C10-38	#16, #10	500	50	⅜	6.25

Standard Series—For use with Stock Tool No. WT-115

D8-10	#9, #8, #7	500	25	#10, #8	12.50
D8-14	#9, #8, #7	500	25	¼	12.50
D8-38	#9, #8, #7	500	25	⅜	12.50
D8-516	#9, #8, #7	500	25	5/16	12.50
E6-10	#6, #5	200	20	#10, #8	13.75
E6-14	#6, #5	200	20	¼	13.75
E6-516	#6, #5	200	20	5/16	13.75
E6-38	#6, #5	200	20	⅜	13.75
F4-10	#4, #3	200	20	#10, #8	18.75
F4-14	#4, #3	200	20	¼	18.75
F4-516	#4, #3	200	20	5/16	18.75
F4-38	#4, #3	200	20	⅜	18.75
G1-14	#1	100	10	¼	31.25
G1-516	#1	100	10	5/16	31.25
G1-38	#1	100	10	⅜	31.25
G2-14	#2	100	10	¼	31.25
G2-516	#2	100	10	5/16	31.25
G2-38	#2	100	10	⅜	31.25

Standard Series for Larger Wires—For Use with No. WT-127 and Power Tools

H10-14	1/0	100	10	¼	40.00
J20-38	2/0	100	10	⅜	45.00
K30-38	3/0	50	5	⅜	52.50
L40-38	4/0	50	5	⅜	67.50
M250-38	250 MCM	50	5	⅜	77.50

STA-KON TV HOOK TERMINALS

For dual conductor plastic ribbon lead-in.

Cat. No.	Wire Size	Price Per 100
A18-6TV	.025—.046	$5.50
A18-10TV	.025—.046	5.50

Weight pounds per 100, 2½.
Carton quantity, 100.
Standard package, 1000.



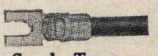
T & B STA-KON® TERMINALS

SELF-INSULATED—INSULATION GRIP STA-KON TERMINALS

FOR USE WITH STOCK TOOL WT 152



Ring Tongue



Spade Tongue

T&B Self-Insulated Sta-Kon Terminals are integral assemblies consisting of: (1) tongue and barrel, fabricated from high-conductivity copper; (2) high-strength bronze sleeve; insulating skirt molded from a polymeric amide, surrounding the bronze sleeve and projecting beyond the end of it. These three parts are assembled by press fit. Then the end of the copper barrel is flared, locking the three parts together and providing a smooth entrance funnel for the wire.

Ring Tongue Sta-Kon Terminals

Cat. No.	Wire Size (Com'l AWG)	Unit Quan.	Std. Pkg.	Wt. Lbs. Per 1000	Price Per 100
RB14-6	#20, #18, #16, #14	100	1000	2½	$7.50
RB14-8		100	1000	3	7.50
RB14-10		100	1000	2½	7.50
RB14-14		100	1000	3½	7.50
RC10-6	#16, #14, #12, #10	50	500	3	10.00
RC10-8		50	500	6	10.00
RC10-10		50	500	5	10.00
RC10-14		50	500	8	10.00
RC10-516		50	500	6	10.00
RC10-38		50	500	6	10.00

Spade Tongue Sta-Kon Terminals

RB14-6F, RB14-10F	#20, #18, #16, #14	100	1000	3½	7.50
		100	1000	4	7.50
RC10-10F, RC10-14F	#16, #14, #12, #10	50	500	6	10.00
		50	500	6	10.00

T & B STA-KON® CONNECTORS

Listed by Underwriters' Laboratories and Other Approved Authorities

STA-KON TWO-WAY CONNECTORS

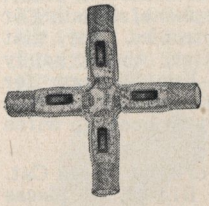


For use with Stock Tools WT-111M and WT-115

Cat. No.	Wire Size (Com'l AWG) Each End	Std. Pkg.	Unit Quan.	Wt. Lbs. Per 1000	Price Per 100
2A 18	#22 to #18	1000	100	2½	$7.00
2B 14	#20, #14	1000	100	3½	7.00
2C 10	#16, #10	500	50	7	10.00
2D 8	#9, #8, #7	250	25	18	18.00
2E 6	#6, #5	200	20	25	30.00
2F 4	#4, #3	150	15	30	35.00

STA-KON FOUR-WAY CONNECTORS

For Use with Stock Tool WT-111M



For use with Standard (A.W.G.) Code Wire. Will also fit any type or size of wire that will go in the barrel.

For three-way connectors remove one branch with cutting pliers.

Cat. No.	Wire Size (Com'l AWG) Each End	Std. Pkg.	Unit Quan.	Wt. Lbs. Per 1000	Price Per 100
4A 18	#22 to #18	500	50	5	$16.50
4B 14	#20, #14	500	50	6	16.50
4C 10	#16, #10	250	25	13	20.75

Sta-Kon Pigtail Connectors—Inquiries are invited for Sta-Kon connectors for pigtailing or connecting wire ends.

T & B STA-KON® CONNECTORS

STA-KON WIRE JOINTS



- brightly-colored transparent cap catches the eye . . . permits visual inspection of joint
- unique ear design locks parts together to prevent loosening of cap by vibration
- wide range—approved for solid or stranded conductor combination up to 3—#12 AWG Max.
- installs with standard Sta-Kon tools as well as new Sta-Kon plus Pliers

Cat. No.	Description	Unit Quan.	Std. Pkg.	Wt. Lbs. Per 1000	Price Per 100
PT-66M	Complete Joint	100	1000	4½	$5.00
PT-60M	Connector only	100	1000	2½	2.25
PT-6M	Insulator only	100	1000	2	2.25
	Without Ears for Use with Tape				
PT-70	Connector only	200	2000	2½	3.50


Patented

STA-KON ONE-PIECE INSULATED WIRE JOINTS

For Use with No. WT-181 Tool

Cat. No.	Wire Size	Unit Quan.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
RB-44	2 #16				
	3 #18, etc....	100	1000	1.3	$5.75
RC-55	3 #14	50	500	2.5	7.00

STA-KON 2-WAY INSULATED CONNECTORS

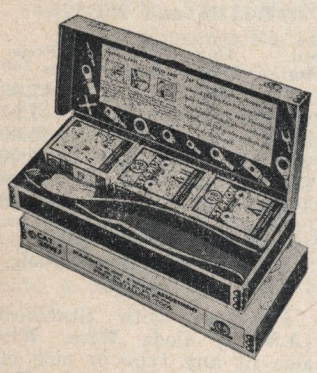
For Use with WT-105M Tool



Cat. No.	Wire Size Each End	Uni Quan.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
2B-16	2 #16	100	1000	2	$6.25
2C-12	2 #12	100	1000	3	9.00

T & B ASSORTMENT KITS

STA-KON PRESSURE TERMINALS



Designed for your special use if you are an electrical contractor, a journeyman, an electrical appliance repair man, an automotive maintenance and repair man, oil burner repair man, airport service depot maintenance and repair man, or a worker in radio, telephone, signaling or electronics. For that matter, these handy Sta-Kon Kits are for any electrical man who is open to an easier and better way to hook up wires No. 20 through No. 10.

No. 20 Assortment Kit consists of: 100 pieces Cat. No. A18-10, 100 pieces Cat. No. B14-10, 50 pieces Cat. No. C-10-10 and 1 No WT111M Sta-Kon Terminal Installing Tool.

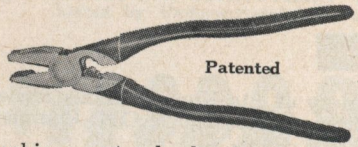
Price, No. 20 Assortment Kit .....**each $12.00**

No. 20WJ Assortment Kit consists of: 200 pieces Cat. No. PT-70, 100 pieces Cat. No. B-14-10, 50 pieces Cat. No. C10-10 and 1 No. WT111M Sta-Kon Terminal Installing Tool.

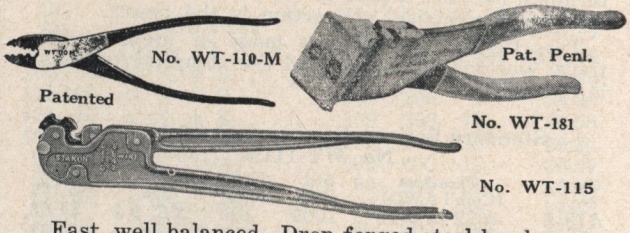
Price, No. 20WJ Assortment Kit .....**each $15.00**

T & B STA-KON® TOOLS

STA-KON PLIERS



Combines a standard pair of electrician's "side cutters" with a new design, wide-range installing die for the PT66-M and other A, B, and C series Sta-Kon connectors (#22 to #10 AWG inclusive).



Fast, well balanced. Drop forged steel head.

Cat. No.	Installs Terminals for Wire Sizes	Color of Handle	Std. Pkg.	Wt. Lbs. Each	Price Each
WT-110M	#22 to #10	Green	1	¾	$7.00
WT-111M	#22 to #10	Red	1	¾	6.00
WT-115	# 8 to# 1	Black	1	3½	36.00
WT-161	#22 to #10	Blue	1	1	8.00
WT-181	Installs RB, RC Wire Joints	White	1	1	12.00
WT-165	TV Terminals	Black	1	1	8.00
WT-152	For Self-insulated Terminals	Yellow	1	1	10.00



RATCHET TOOL

With one nest.

Cat. No.	Installs Terminals For Wire Sizes	Std. Pkg.	Wt. Lbs. Each	Price Each
WT-127G	#2, #1			
WT-127H	1/0			
WT-127J	2/0	1	12	$100.00
WT-127K	3/0			
WT-127L	4/0			
WT-127M	250MCM	1	10	
WT-127	Tool Only	1	10	90..00
	Additional Nests for WT-127 Tool			
21651	#2, #1			
21652	1/0			
21653	2/0	1	2	10.00
21654	3/0			
21655	4/0			
21656	250MCM			

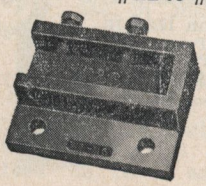
SHURE STAKE® TOOL



Toggle type hand tool with pawl which guarantees perfect "Sta-Kon" Installations.

Work cannot be removed until stake is properly completed. Cushion grip handles.

Cat. No.	Installs Terminals For Wire Sizes	Color of Handle	Std. Pkg.	Wt. Lbs. Each	Price Each
WT-130	#22 to #10	Red	1	1½	$24.00
WT-145	#22 to #10	Black	1	1½	45.00

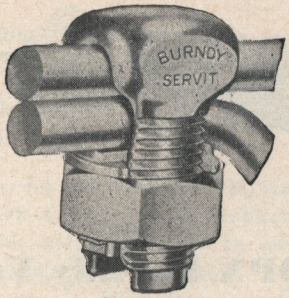


BENCH ADAPTER

For hand tools, WT-115 or WT-127.

Cat. No.	Std. Pkg.	Wt. Lbs. Each	Price Each
WT116	1	2½	4.00

Burndy Servits

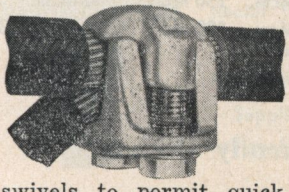


Type KS
For Copper Cable or Wire

The all-purpose service connector. Thirteen sizes take conductors ranging from No. 14 wire to 1000 MCM. cable. Most sizes forged of high strength copper alloy. KS15 to KS44 inclusive are listed by Underwriters' Lab., Inc.

No. Type KS	Maximum Conductor Size Solid	Stranded	Ctn. Qty.	Ship. Wt. Lb. Per 100
KS90	10	12	100	2¼
KS15	8	8	100	3¼
KS17	6	7	100	5¼
KS20	4	5	100	8
KS22	2	3	100	11
KS23	1	2	100	12
KS25	2/0	1/0	50	17
KS26	3/0	2/0	25	28
KS28	4/0	4/0	25	53
KS31	...	350 Mcm.	12	93
KS34	...	500 Mcm.	12	135
KS39	...	750 Mcm.	6	200
KS44	...	1000 Mcm.	6	290
KS17-3	6	7	100	5½
KS20-3	4	5	100	8½
KS22-3	2	3	100	12

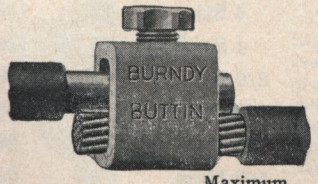
Type KVS Burndy Oklip



A husky but compact connector suited for heavy-duty service connections. Completely encircles and firmly forces conductors into high pressure contact. Casting swivels to permit quick insertion of conductors. Washers forced over threads eliminate hazard of loose hardware. All edges are rounded for easy taping. Listed by Underwriters' Labs., Inc.

Cat. No.	CONDUCTOR RANGE MAX. Run	Tap	MIN. Run	Tap	Carton Qty.
KVS26	2/0 Str.	2/0 Str.	2 Str.	10 Str.	25
KVS28	4/0 Str.	4/0 Str.	1/0 Str.	10 Str.	25
KVS31	350 Mcm.	350 Mcm.	250 Mcm.	10 Str.	12
KVS34	500 Mcm.	500 Mcm.	400 Mcm.	10 Str.	12
KVS40	800 Mcm.	800 Mcm.	400 Mcm.	3/0 Str.	6
KVS44	1000 Mcm.	1000 Mcm.	500 Mcm.	3/0 Str.	6

Type KP Burndy Buttins

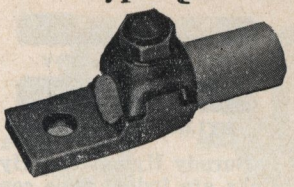


An efficient house service connector for attaching wires and cables on end.

Easy to tape, low resistant joint, installed with either pliers or screwdriver.

No.	Maximum Conductor Size Solid	Stranded	Std. Pkg.	Ship. Wt. Lb. Per 100
KP6C	5	6	100	2½
KP4C	3	4	100	4¾

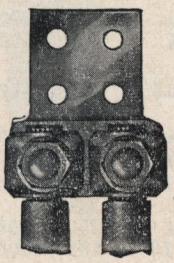
Type QA-B Burndy Qiklugs



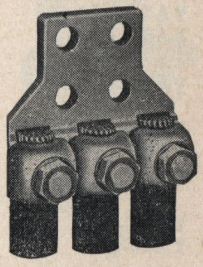
A terminal connector for rapid termination of wires and cables, accommodates a range of cable sizes, supplied with either one or two holes in the terminal tongue, furnished with tongues and drilling. Listed by Underwriters' Labs., Inc.

No.	Cable Range From	To	No. Holes in Contact Pad	Carton Qty.
QA8C-B	14 Sol.	8 Str.	1	25
QA4C-B	8 Str.	4 Str.	1	25
QA1C-B	4 Str.	1 Str.	1	25
QA26-B	1/0 Str.	2/0 Str.	1	12
QA26-2B	1/0 Str.	2/0 Str.	2	12
QA28-B	3/0 Str.	4/0 Str.	1	9
QA28-2B	3/0 Str.	4/0 Str.	2	9
QA31-B	250 Mcm.	350 Mcm.	1	6
QA31-2B	250 Mcm.	350 Mcm.	2	6
QA34-B	400 Mcm.	500 Mcm.	1	6
QA34-2B	400 Mcm.	500 Mcm.	2	6
QA40-B or-2B	600 Mcm.	800 Mcm.	1 or 2	6
QA44-B or-2B	850 Mcm.	1000 Mcm.	1 or 2	6

Type Q2A and Q3A Burndy Qiklugs



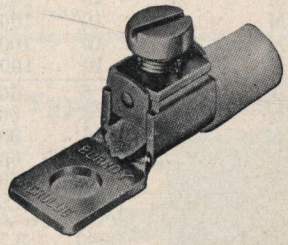
Type Q2A



Type Q3A

For terminating two or three conductors respectively. Special variations of the Qiklugs available, including types where clamping element is at an angle to terminal tongue.

Type KPA Burndy Scrulugs

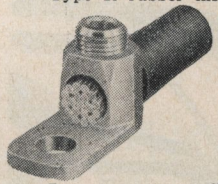


For low cost indoor terminal connections. Installed with screwdriver or pliers. Compact construction, useful on panelboards, in fuse boxes, safety switches, etc. Listed by Underwriters' Labs., Inc.

No.	Conductor Range From	To	1947 N.E.C. Conductor Rating* (Rub. Ins.)	Ctn. Qty.	Ship. Wt. Lb. Per 100
KPA 8C	14 Sol.	8 Str.	55A	100	2.3
KPA 4C	14 Sol.	4 Str.	105A	100	3.5
KPA25	4 Str.	1/0 Str.	195A	100	8
KPA28	1/0 Str.	4/0 Str.	300A	25	25
KPA34	4/0 Str.	500 Mcm.	515A	18	50

* Type R rubber insulation—Single conductor in free air.

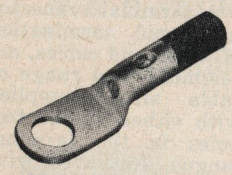
Type KA Burndy KALUG



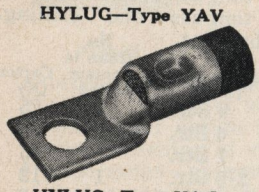
A low cost lug of high conductivity copper alloy with Allen Head screw for easy terminating at service switch, terminal block, etc.

Cat. No.	Copper Conductor Range Minimum	Maximum	Approx. Ship. Wgt. Per C	Quan. in Ctn.
KA8C	14 Sol.	8 Str.	2.1	100
KA4C	14 Sol.	4 Str.	4.3	100
KA25	4 Str.	1/0 Str.	14.5	50
KA28	1 Str.	4/0 Str.	23.5	25
KA34	4/0 Str.	500 Mcm.	64	18

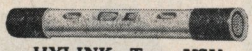
BURNDY HYLUGS AND HYLINKS



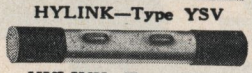
HYLUG—Type YAV



HYLUG—Type YA-L



HYLINK—Type YSV



HYLINK—Type YS-L

Burndy Hylugs and Hylinks are indent type connectors, made for all sizes of wire and cable. Installed with Burndy Hytools and Hypresses. (See below).

Ten assorted cartons combined, of all items listed below constitutes a "Standard Package". Listed by Underwriters'.

Cat. No.	Conductor Range	For Use On Screw Size	Carton Qty.	Std. Pkg. Qty.
YAV14-T5	#20 thru #12 Sol.	4- 6	200	2000
YAV14	#20 thru #12 Sol.	8-10	200	2000
YAV14-T2	#20 thru #14 Str.	¼	200	2000
YAV10	#11 thru #9 Sol.	8-10	100	1000
YAV10-T3	#12 and #10 Str.	¼	100	1000
YAV8C-L	8 Str.	8-10	100	1000
YAV8C-L1	8 Str.	¼	100	1000
YA6C-L	6 Str.	¼	50	500
YA6C-L3	6 Str.	5/16	50	500
YA4C-L	4 Str.	¼	50	500
YA4C-L4	4 Str.	⅜	50	500
YA2C-L	2 Str.	5/16	25	250
YA2C-L2	2 Str.	¼	25	250
YA25-L	1/0 Str.	5/16	10	100
YA25-L4	1/0 Str.	⅜	10	100
YA26-L	2/0 Str.	⅜	10	100
YA27-L4	3/0 Str.	⅜	10	100
YA28-L4	4/0 Str.	⅜	10	100
YA29-L	250 Mcm.	½	10	100
YA30-L	300 MCM	½	10	100
YA31-L	350 MCM	½	10	100
YA32-L	400 MCM	⅝	10	100
YA34-L	500 MCM	⅝	10	100
YS29-L	250 MCM	..	6	60
YS30-L	300 MCM	..	6	60
YS31-L	350 MCM	..	6	60
YS32-L	400 MCM	..	6	60
YS34-L	500 MCM	..	6	60

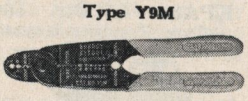
Cat. No.	Conductor Range	Carton Qty.	Std. Pkg.	Wt. Lbs. Per 1000
YSV14	#20 thru #12 Sol. #20 thru #14 Str.	200	2000	2.7
YSV10	#11 thru #9 Sol. #12 and #10 Str.	200	2000	5.3

For larger size Hylugs and Hylinks, information on request.

BURNDY INSTALLATION TOOLS

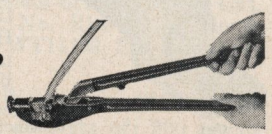
Hytool, Catalog No. Y9M . . . A popular hand tool for installing Hydent connectors on conductor sizes, No. 22 to 10.

Type Y9M



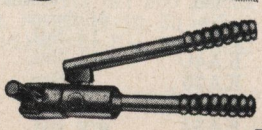
Hytool, Catalog No. MY29 . . . A hand tool for installing Hydent connectors on conductor sizes No. 8 to 250 Mcm.

Type MY29

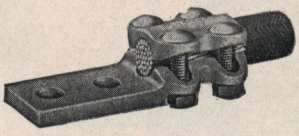


Hypress, Catalog No. Y34A . . . Insulated, hand-operated hydraulic tool for Hydent connectors on No. 6 to 500 Mcm., with proper dies.

Type Y34-A



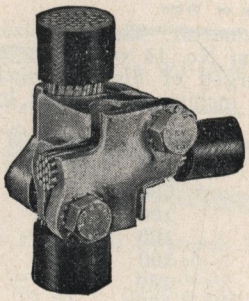
Type NA Burndy Multigrip Lugs



A multigrip, heavy duty terminal for all sizes of cable or tube.

Special tongue designs supplied.

Type QPX Burndy Versitaps



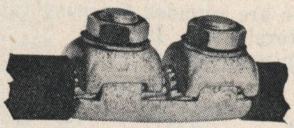
An all-purpose connector for use as a tee, tap, cross, parallel or End Connector.

Takes wide range of cables. Installed with a wrench.

Ten sizes accommodated from No. 6 stranded wire to 1000 Mcm. cables. Listed by Underwriters' Labs., Inc.

No.	Run Range From	Run Range To	Top Range From	Top Range To	Carton Qty.
QPX2C2C	6 Str.	2 Str.	6 Str.	2 Str.	12
QPX282C	1 Str.	4/0 Str.	6 Str.	2 Str.	12
QPX2828	1 Str.	4/0 Str.	1 Str.	4/0 Str.	9
QPX342C	250 Mcm.	500 Mcm.	6 Str.	2 Str.	6
QPX3428	250 Mcm.	500 Mcm.	1 Str.	4/0 Str.	6
QPX3434	250 Mcm.	500 Mcm.	250 Mcm.	500 Mcm.	6
QPX442C	500 Mcm.	1000 Mcm.	6 Str.	2 Str.	3
QPX4428	500 Mcm.	1000 Mcm.	1 Str.	4/0 Str.	3
QPX4434	500 Mcm.	1000 Mcm.	250 Mcm.	500 Mcm.	3
QPX4444	500 Mcm.	1000 Mcm.	500 Mcm.	1000 Mcm.	3

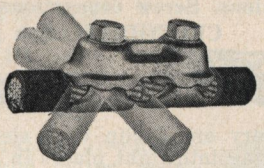
Type QR Burndy Qiklinks



A connector for joining two cables on end. No parts to separate; just insert cable, tighten 2 nuts. Forms a neat and compact joint that can be readily taped. Retains full salvage value. Listed by Underwriters' Labs., Inc.

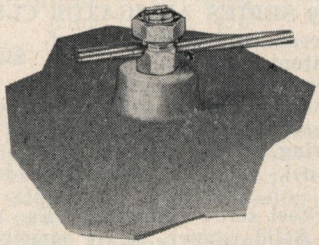
Cat. No.	Conductor Range From	Conductor Range To	Carton Qty.	Std. Pkg. Qty.
QR8C	14 Sol.	8 Str.	25	100
QR4C	6 Sol.	4 Str.	25	100
QR1C	4 Str.	1 Str.	25	100
QR26	1/0 Str.	2/0 Str.	12	48
QR28	3/0 Str.	4/0 Str.	9	36
QR31	250 Mcm.	350 Mcm.	6	24
QR34	400 Mcm.	500 Mcm.	6	24
QR40	600 Mcm.	800 Mcm.	3	12
QR44	850 Mcm.	1000 Mcm.	3	12

Type ER Burndy Versilinks



A Versi-Connector for use either as a link, reducer or elbow. May be used with any number of combinations of cables. Swivel cable grips permit cables to be joined at several angles. Listed by Underwriters' Labs., Inc.

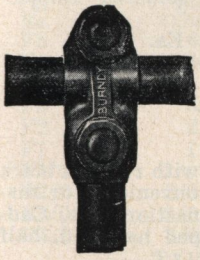
Type K2C Burndy Servit Posts



For connecting one or two wires or cable taps to bus bars, and especially for grounding steel sections, fence posts, lighting standards and substation steel.

When ordering specify whether for one or two wires or cables. Furnished for all cable sizes. Listed by Underwriters' Labs., Inc.

Burndy T-Connectors

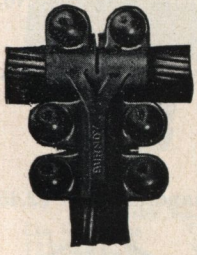


Type QT Burndy Qiktaps

A compact, quickly installed T-connector for cable.

Locked against loosening from vibration.

Supplied for any combination of cables. Listed by Underwriters' Labs., Inc.



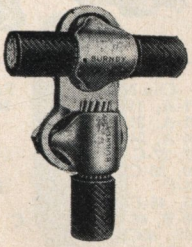
Type NT Burndy Multigrip Tees

Multigrip type T-connector for all sizes of cable, tube or combination.

For heavy duty applications.

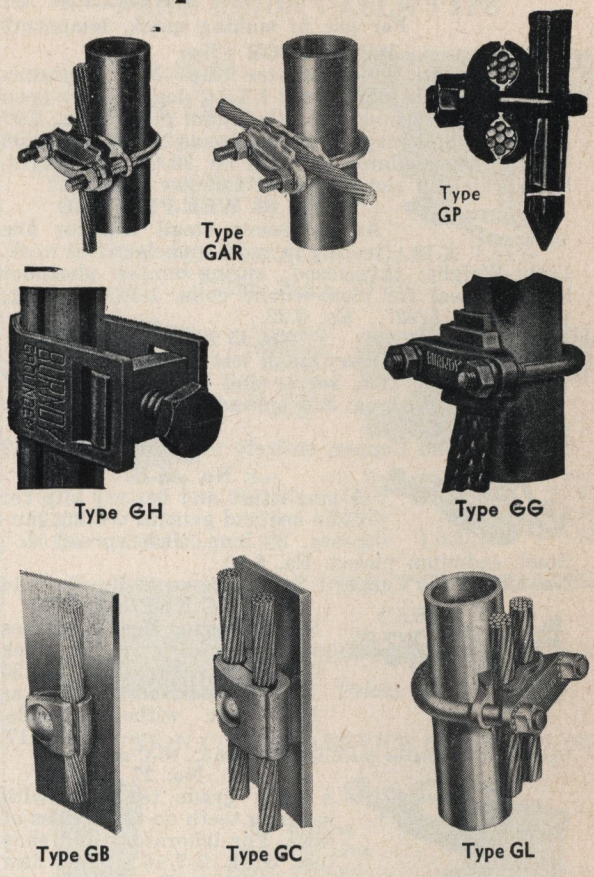
Oval shank bolts permit rapid installation with a single wrench.

Type VT Burndy Varitap



T-Connector designed to take a large range of cable, sizes on run and tap. The flattened V-bolt provides a powerful grip that will not crush the wire strands. High copper alloy provides high conductivity and corrosion resistance. Listed by Underwriters' Labs., Inc.

Burndy Ground Connectors



Burndy offers a complete line of ground connectors for use on driven rod, flat bar, tower legs, oil tanks, rails, pipe, etc. Burndy Ground Connectors are made of high copper alloy bodies with Durium bolts, nuts and lock washers to provide a complete corrosion-resistant assembly and high electrical conductivity.

Prices, dimensional data, etc. supplied upon request.

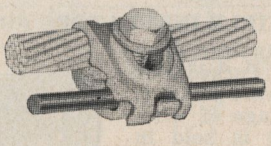
Type CP Burndy Parallel Clamps



A parallel clamp for heavy duty with a variety of uses. Installed with single wrench setting.

Ample contact surface and pressure prevent overheating even under overload.

Burndy Universal Parallel Clamps Type UC-L



A light duty connector accommodating copper, aluminum, Copperweld, ACSR, Amerductor and Steel in either cable groove. The tin-plated body is cast of high copper alloy in two symmetrical halves, and is clamped with a plated steel bolt. Interlocking finger design permits conductor range for each unit.

MUELLER UNIVERSAL CLIPS

For use in making quick, temporary electrical connections. Screw connections.

MINI-GATOR Clips



No. 30—Minigator Clip—New miniaturized clip! Only 1-1/16" long. Jaws open 3/16". Solder connection. Cadmium plated. Ea. $.07

No. 30-C. Solid copper. Same size as No. No. 30. Ea. $.08

Use No. 32 insulator for clips 30, 30-C. Skin tight, has special tip slot to permit full jaw opening.



No. 88 WEE-PEE-WEE

An extremely small clip for fine testing in radio and electrical work. Light-Weight; thin-nosed; spring-temper phosphor bronze. Ideal for close-wound coils. 1-11/16" long; jaw spread 5/32". Ea. $.22.



No. 45 PEE WEE

A very small test clip for radio, ignition, meter and similar work. 1½" long. Jaw spread $\frac{5}{16}$". Steel, cadmium plated. Ea. $.07.

No. 45C Solid Copper, entirely non-ferrous Ea. $.13



No. 48-B

A small test and battery clip for radio use and general testing purposes. 2" long. Jaw spread $\frac{7}{16}$". Steel, cadmium plated. Ea. $.10

No. 48-C Solid Copper. Same size as 48-B. Ea. $.14



No. 50-C NEEDLE CLIP

Solid bronze. Needle pierces insulation of wire for quick test contact. 2¼" long. Ea. .25

No. 51-C test clip. Same as 50-C but without needle. Ea. $.17.

Use No. No. 49 insulator for Clips 48-B, 48-C, 50-C and 51-C.



No. 27

A high grade test clip with meshing teeth on three sides of jaws. For laboratory and shop test work 2-7/16" long. Jaw spread ⅝". Steel, cadmium plated. Ea. $.12.

No. 27-C Solid copper. Same size as No. 27. Ea. $.20

Use No. 29 Insulator for clips 27 and 27-C.

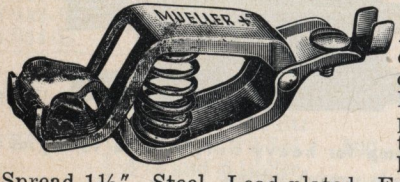


No. 24-A

A medium sized battery clip. Stands erect on battery post. Lead coated copper shunt protects spring. 2⅞" long. Jaw spread ¾". Steel, lead plated. Ea. $.20.

No. 24-C—Solid copper. Same size as No. No. 24-A. Ea. $.34.

Use No. 26 Insulator for Clips 24-A and 24-C.



No. 21-A

A large heavy duty battery charging clip. Lead coated copper shunt protects spring. 4" long. Jaw Spread 1⅛". Steel. Lead plated. Ea. $.36.

No. 21-C—Solid Copper with lug connection, length 4½". Same size as 21-A. Ea. $.88.

Use No. 23 Flexible Insulator with Clips 21-C and 21-A.

LARGER SIZES OF CLIPS

No. 11-A—100 Amp. Steel, lead plated, 6" long $1.00
No. 11C—200 Amp. Solid Copper, 6" long 1.70
No. 33-C—300 Amp. Solid Copper, 7¾" long .. 3.25
(Above furnished with lug connections)

CROCODILE Clips





No. 85—A very small clip with slender, elongated jaws for getting into tight places in radio or electrical test work. Screw connection. 2⅛" long. Ea. $.08.

No. 85-C—Same as No. 85, except solid copper. A radio frequency, entirely non-ferrous test clip. Ea. .16

No. 85-T—New Crocodile "Tip-Clip"—equipped with standard phone tip on one jaw, otherwise same as No. 85. Ideal for use as a prod, for ordinary clip connections and for connections to insulated binding posts having non-removable heads. 2⅝" long. Ea. .21

Use No. 87 Insulators for Clips 85, 85-C and 85-T.

70 SERIES ALLIGATOR CLIPS



No. 70S

NEW! Streamlined simplicity of design, patented extruded hinge construction. Crimping ears make screw connection easier, soldered connection faster. All clips are 1$\frac{11}{16}$" long, have full $\frac{5}{16}$" jaw spread, snappy spring.

No. 70 Steel, cadmium plated, soldered connection ..... Ea. $.07

No. 70S Steel screw connection. Ea. .08

No. 70CS Solid copper, screw connection. Ea. .11

Use No. 62 Insulator

60 SERIES ALLIGATOR CLIPS





Accurately made slim jaws. Fine meshing teeth, barrel connection for banana plug. Small soldering lip. Strong spring. Three clips listed are 2" long, 5/16" jaw spread.

No. 60 Steel, cadmium plated, soldered connection. Ea. $.07.

No. 60S Steel, screw connection. Ea. $.08.

No. 60CS Solid copper, screw connection. Ea. $.12

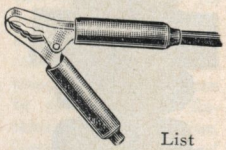
No. 62 Flexible insulator. Ea. .07.

No. 60-HS—Steel Alligator Clip with Insulated Handle

Same as No. 60-S except equipped with red and black insulating sleeves on end. Very convenient for distinguishing leads. Has screw connection also. Cadmium plated. 2 11/32" long. Shipped half red, half black. Ea. $.14.

No. 60-CHS—Solid Copper. Otherwise same as No. 60-HS. Ea. $.16.

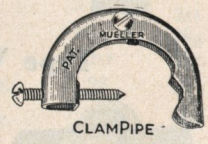
No. 41-C Hippo-Clip. Solid copper, 200 Amp. Improved design. Easy one-hand operation. Jaws open full 1-9/16". Cable attached with detachable lug on one leg, or sweated in built-in strap on other leg. Supplied with ½ red, ½ black insulating handles. Ea. $2.45



List

Ground Clamp

No. 58. Point of large, case hardened screw cuts through paint or corrosion into clean fresh metal insuring good contact. Takes pipe up to 1⅜" O.D. Also serves as light duty pipe or conduit hanger. Ea. $.20.



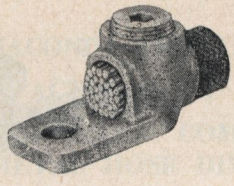
FLEXIBLE INSULATORS FOR CLIPS

A convenient protection against short circuit and electric shock. Packed half red and half black to indicate polarity. Long tail prevents breakage of wire. Constructed so that clip is held in firmly. White, yellow and blue insulators available from stock on special order, at 10% additional cost.



Insulator No.	For Use with Clip No.	Each
13	11-A, 11-C	$0.77
23	21-A, 21-C	.48
26	24-A, 24-C	.24
29	27, 27-C	.16
32	30, 30-C	.11
35	33-C	2.58
47	45, 45-C	.07
49	48-B, 48-C, 50-C, 51-C	.10
62	60S, 60CS, 60, 70, 70S, 70CS	.07
87	85, 85-C, 85-T	.07
93	88	.10

PENN LUG CONNECTOR
TYPE PNL



A low cost lug designed to give up to 11% more contact area with the conductor than conical cylindrical or hexagonal bodies.

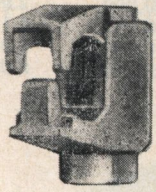
Annular serrations give higher conductivity and better resistance to horizontal pull. Insulation butts flush, full circle, giving a snug fit and easier taping.

Body is high strength copper alloy. Screw is steel, cadmium plated. UL approved in all sizes.

Cat. No.	Conductor Range Minimum	Maximum	Price Each
PNL8	14 Sol.	8 Str.	$0.12
PNL4	14 Sol.	4 Str.	.16
PNL1/0	4 Sol.	1/0	.37
PNL4/0	1/0	4/0	.76
PNL300	1/0	300	.80
PNL500	4/0	500	1.76
PNL1000	500	1000	4.75

For silver plating of .0005-inch or less add letters SV to catalog number and add 15% to price. (For heavier silver plating request a quotation.) For electro-tinning add letters TN to catalog number and add 15% to price.

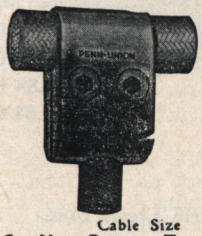
PENN UNION VISE GRIP
TYPE F



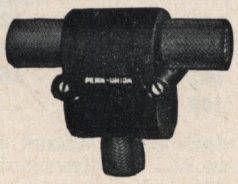
Gives greater grip on the conductors — and full compression with any conductor combination. Will not distort under load and is non-swiveling — the slide can't rotate out of the body. Aluminum silicon bronze; bolts are silicon bronze, rolled threads.

Cat. No.	Minimum 2 Conductors	Maximum 2 Conductors Equal Size	Price Each
F8	6 Sol.	10 Sol.	$0.26
F6	4 Sol.	8 Sol.	.28
F4	4 Str.	6 Sol.	.35
F3	3 Str.	6 Sol.	.49
F2	2 Str.	4 Sol.	.54
F1	1 Str.	4 Sol.	.61
F1/0	1/0 Str.	2 Sol.	.71
F2/0	2/0 Str.	2 Sol.	1.18
F3/0	3/0 Str.	1 Sol.	1.58
F4/0	4/0 Str.	1/0 Sol.	2.00

TYPE PC-90 CABLE TAPS

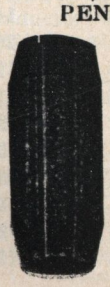


Moulded Bakelite Covers Furnished At Extra Cost



Cat. No.	Cable Size Run	Tap	Each	Cat. No.	Cable Size Run	Tap	Each
11186	6	6	$.95	11376	500,000	4/0	$2.55
11276	4/0	4/0	1.70	11458	750,000	1/0	3.40
11290	250,00	4/0	1.90	11591	1,000,000	4/0	4.00

PENN UNION SPLICING SLEEVES
Furnished for every size cable

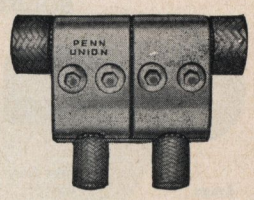


Cat. No.	Cable Size	Each
3	6	$.12
9	1/0	.28
10	2/0	.30
12	4/0	.40
13	250,000	.47
18	500,000	.78
23	750,000	1.42
28	1,000,000	2.21
32	2,000,000	6.58
33	2,500,000	8.05

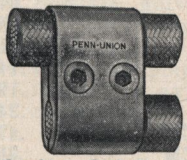
PENN UNION CABLE TAPS
TYPE PC-90 CABLE TAPS

Also made in two tap type

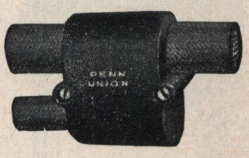
Prices on application



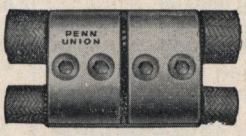
TYPE PCT PARALLEL CABLE TAPS
TWO WAY TYPE



Moulded Bakelite Covers Furnished At Extra Cost



Cat. No.	Cable Size	Each	Cat. No.	Cable Size	Each
10014	6	$.90	10209	500,000	$3.05
10104	4/0	1.70	10323	750,000	4.85
10109	250,000	1.35	10433	1,000,000	7.00

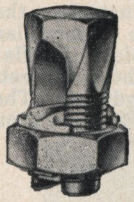


TYPE PCT PARALLEL CABLE TAPS

Also made in 3 way type

Prices on application

PENN UNION COPPER SERVICE CONNECTIONS



Power Type

For Making Solderless Line Taps—Primary, Secondary, Service and Transformer



Service Entrance Type

And for all purposes where a dependable electrical and mechanical solderless connection is required.

POWER TYPE

Cat No	Copper So	Str	3 Strd. Copper Copperweld	Each
S-10-S	10	10	...	$.23
S-8-S	8	8	...	.25
S-6-S	6	8	8A	.27
S-4-S	4	6	6A	.33
S-3-S	2	4	4A	.47
S-2-S	1	2	...	.51
S-1/0-S	...	1/0	2A	.68
S-2/0-S	...	2/0	...	1.12
S-4/0-S	...	4/0	...	1.90
S-350-S	350,000 CM		...	3.31
S-500-S	500,000 CM		...	4.31
S-1000-S	1,000,000 CM		...	9.91

ASCR (Aluminum)

PAC-1	4	...	....	$.49
PAC-2	2	...	....	.53
PAC-4	1	...	....	.99

SERVICE ENTRANCE TYPE

SX-10-8	10	....	....	.13
SX-6	6	....	....	.14
SX-4	4	....	....	.18

Nos. 6 to 4/0 wire sizes have nut retainers.

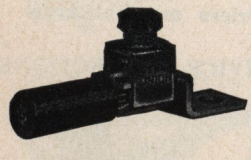
No cash discount.

PENN UNION
SOLDERING LUGS



Round end, $\frac{3}{16}$ thru $\frac{13}{16}$ in.; larger sizes, square end.

Amps.	Tube Size Inside	Wire Size Capacity	Each
25	$\frac{3}{16}$	10	$ .03
35	$\frac{1}{4}$	8	.04
50	$\frac{5}{16}$	6	.05
70	$\frac{3}{8}$	4	.06
90	$\frac{7}{16}$	2	.08
125	$\frac{1}{2}$	0	.11
150	$\frac{9}{16}$	00	.14
175	$\frac{5}{8}$	000	.19
225	$\frac{11}{16}$	0000	.24
250	$\frac{13}{16}$	250,000 CM	.47
325	$\frac{15}{16}$	400,000 CM	.69
362	1	450,000 CM	.87
400	$1\frac{1}{16}$	500,000 CM	1.08
450	$1\frac{1}{8}$	600,000 CM	1.15
550	$1\frac{1}{16}$	800,000 CM	1.82
650	$1\frac{7}{16}$	1,000,000 CM	2.03
850	$1\frac{3}{4}$	1,500,000 CM	3.54
1050	$2\frac{1}{16}$	2,000,000 CM	5.74



PENN-UNION SOLDERLESS LUGS

Simplicity is an outstanding feature. Just place the wire in the triangular bottom below the flat piece and tighten the set-screw with a wrench, pliers or screwdriver. The vise-like grip gives a perfect permanent connection. Holds solid or stranded wires equally well.

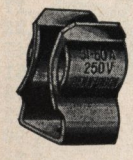
OFFSET LUGS

No.	Amps.	Wire Size	Each
SLU-70	70-90	2, 4, 6, 8, comb. 8 & 4, 8 & 6	$ .14

STRAIGHT TYPE

SLS-70	70-70	2, 4, 6, 8, comb. 8 & 4, 8 & 6	$ .14
SLS-125	125	1/0 1, 2	.23

PENN-UNION FUSE CLIPS



Size 30 to 60 Amps.

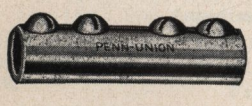
Amps.	Volts	Each
0-30	250	$ .06
31-60	250	.13
0-30	600	.10
31-60	600	.15



Size 100 to 200 Amps.

61-100	250-600	.30
101-200	250-600	.60

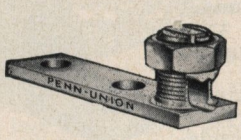
PENN-UNION SET SCREW CONNECTORS

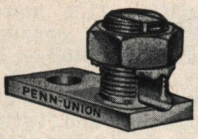


Turned from solid brass rods with hole through center.

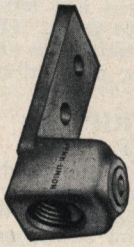
No.	Set Screws	Size of Wire	Each
50	2	12	$.15
51	2	10	.16
55	2	6	.20
57	2	4	.22
58	4	4	.23
60	4	2	.28

PENN-UNION EZ TERMINAL LUGS
Prices for single hole tongue



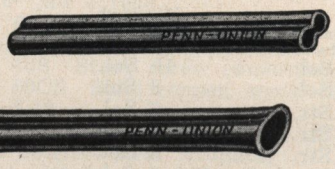


Cat. No.	Range Size	Each	Cat. No.	Range Size	Each
ZE-1	14-6	$ .38	ZE-28	2-250,000	$1.80
ZE-9	8-3	.66	ZE-41	250M-500,000	2.75
ZE-16	4-1/0	.85	ZE-46	350M-750,000	4.35
ZE-18	4-2/0	1.05	ZE-48	500M-1,000,000	5.30
ZE-24	6-4/0	1.42			



VI-TITE TERMINAL LUGS

Cat. No.	Cable Range Size	Each
21761	8-6	$ .70
21764	4-1	.90
21767	2-2/0	1.20
21773	1/0-4/0	1.65
21779	3/0-300,000	2.00
21784	300,000-500,000	3.10
21789	500,000-800,000	4.90
21794	700,000-1,000,000	5.90



PENN-UNION COPPER SLEEVES

Double Tube Copper Sleeve—For Copper Wire

Cat. No.	Size B&S	Size NBS	Lengths	Less than 5000
104	10	12	4¾"	$7.15 C
103	12	14	4½"	6.13 C
102	14	16	4"	5.88 C
100	17	..	4"	5.62 C

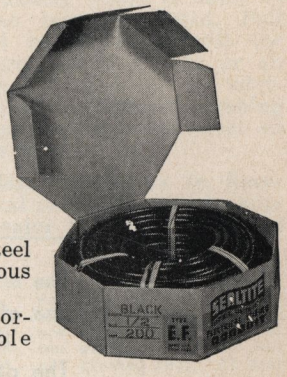
Single Tube Copper for Electric Light Lines

Cat. No.	Copper Solid	Strd.		Less than 100	100 to 500
123	8	..	.....	$12.52	$11.89
124	6	..	.....	15.33	14.56
125	4	5	.....	27.84	26.45
126	3	4	.....	32.70	31.07
127	2	3	.....	43.17	41.01
128	1	2	.....	55.17	52.41
129	0	1	.....	77.65	73.77
130	2/0	0	.....	98.08	93.18
131	3/0	2/0	.....	136.91	130.06
132	4/0	3/0	.....	210.21	199.69
133	..	4/0	.....	226.56	215.23

"SEALTITE"* FLEXIBLE, LIQUID-TIGHT CONDUIT

— AN ANACONDA PRODUCT
MANUFACTURED BY
THE AMERICAN BRASS COMPANY
AMERICAN METAL HOSE DIVISION

*Trademark



A few uses

- Protects wiring against oil, moisture, dirt, chemicals, corrosive fumes, salt spray, weather.
- Takes movement, vibration.
- Follows contours of machinery, makes neat appearance.
- Protects wiring on industrial equipment, motor leads, outdoor equipment, lighting systems, machine tools.
- Reduces burn-outs, downtime.

Construction

- Flexible galvanized steel core made from continuous strip metal.
- Extruded polyvinyl chloride cover over flexible metal core.

Easy to Install

- Shipped in strong corrugated reusable container in easy-to-handle coils.
- Can be cut on the job—minimum waste.
- Flexibility allows getting into cramped spaces, permits "U" bend installations.
- Flexibility cuts down installation time, effort.
- Takes standard liquid-tight connectors available at Electrical Wholesaler Houses.

"SEALTITE" AVAILABLE IN THREE TYPES

TYPES U.A., C.S.A.



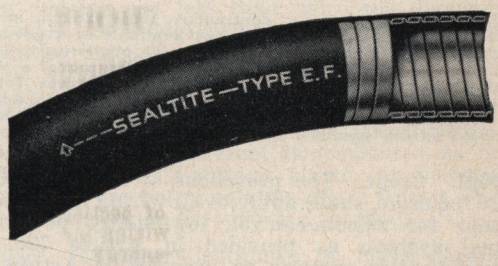


Sealtite Type U.A. is the first flexible, liquid-tight conduit to be approved by Underwriters' Laboratories, Inc. Available in black and gray.
Sealtite Type C.S.A. is the first flexible, liquid-tight conduit to be approved by the Canadian Standards Association.
Both Types U.A. and C.S.A. have some specifications (below), both have a continuous copper bonding conductor wound into the core. Markings on cover identify each type.

Trade Size	INSIDE DIAMETER Min.	INSIDE DIAMETER Max.	OUTSIDE DIAMETER Min.	OUTSIDE DIAMETER Max.	Appr. Inside Bend Diam.	Est. Wgt. (Lbs. Per 100 Feet)	Feet Per Std. Coil
⅜	.484	.504	.690	.710	8	30.0	200
½	.622	.642	.820	.840	10	36.6	200
¾	.820	.840	1.030	1.050	15	48.2	150
1	1.041	1.066	1.290	1.315	18	87.7	100
1¼	1.380	1.410	1.630	1.660	21	116.5	50

Commercial tolerances apply on above figures

TYPE E.F.



Sealtite Type E.F.† is an extra flexible, liquid-tight wiring conduit for use on machine tools and industrial equipment. Sealtite Type E. F. meets J. I. C. (Joint Industry Conference) requirements. Construtution: core made of strip wound galvanized steel flexible metal hose; liquid-tight extruded polyvinyl cover. Available in black and machine tool gray.

†Pat. applied for

Trade Size (Ins.)	INSIDE DIAMETER Min.	INSIDE DIAMETER Max.	OUTSIDE DIAMETER Min.	OUTSIDE DIAMETER Max.	Appr. Inside Bend Diam.	Est. Wgt. (Lbs. Per 100 Feet)	Feet Per Std. Coil
⅜	.485	.505	.690	.710	5	24.0	250
½	.620	.640	.820	.840	6	29.0	200
¾	.815	.835	1.030	1.050	9	38.5	175
1	1.030	1.055	1.290	1.315	10	67.5	100
1¼	1.370	1.395	1.630	1.655	13	87.0	100
1½	1.575	1.600	1.875	1.900	15	117.0	50
2	2.020	2.045	2.350	2.375	17	155.0	50
2½	2.480	2.505	2.850	2.875	20	198.0	50
3	3.070	3.095	3.470	3.500	27	282.0	20*
4	4.000	4.050	4.465	4.500	34	414.5	20*

Commercial tolerances apply on above figures

Excerpts from

THE NATIONAL ELECTRICAL CODE

1956 Edition

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The Editor

Article 300

GENERAL REQUIREMENTS FOR WIRING METHODS

On premises where a continuous underground metallic water-piping network system is not available as a grounding electrode, and where it is not practicable otherwise to secure a ground of permanently low resistance, the use of a wiring method which does not employ metal enclosures for the wires is recommended, unless the character or occupancy of the building is such as to require the use of a metal-enclosed wiring system.

3001. Scope. The provisions of sections 3002 to 3020 inclusive, shall; apply to all wiring installations, except for remote-control, low-energy power and signal systems as provided in Article 725, and communication systems as provided in Article 800.

The provisions of this article are not intended to apply to the conductors which form an integral part of equipment such as motors, motor controllers and the like.

3002. Voltage Limitations. Wiring methods specified in Chapter 3 may be used for voltages not exceeding 600, unless specifically limited in some article of Chapter 3, and may be used for voltages over 600 where specifically permitted elsewhere in this code.

3003. Protection Against Corrosion and Mechanical Injury. Conductors and equipment shall be protected against corrosion and mechanical injury in accordance with the following:

a. Corrosion. Metal raceways, cable armor, boxes, cabinets and all metallic elbows, couplings, and fittings, unless made of corrosion-resistant material, shall be suitably protected against corrosion inside and outside (except threads at joints) by a coating of approved corrosion-resistant materials such as zinc, cadmium, or enamel; except that ferrous raceways, fittings and boxes protected from corrosion solely by enamel may be used only indoors and in occupancies not subject to severe corrosive influences.

See section 3462 for conduit, and section 3482 for electrical metallic tubing.

Meat-packing plants, tanneries, hide cellars, casing rooms, glue houses, fertilizer rooms, salt storage, some chemical works, metal refineries, pulp mills, sugar mills, round houses, some stables, and similar locations are judged to be occupancies where severe corrosive conditions are likely to be present.

b. Mechanical Injury. If subject to mechanical injury, conductors shall be adequately protected.

3004. Secured in Place. Raceways, cable assemblies, boxes, cabinets and fittings shall, unless otherwise provided, be securely fastened in place. Raceways and cable assemblies shall be mechanically secured to boxes, fittings, cabinets and other enclosures, except as provided for non-metallic boxes in section 3710.

3005. Runs Continuous. Raceways and cable assemblies shall be continuous from outlet to outlet and from fitting to fitting. Conductors shall be continuous from outlet to outlet and, except as permitted for auxiliary gutters in section 3748, and for wireways in section 3625, there shall be no splice or tap within the raceway itself.

3006. Free Length of Conductors at Outlets. At least six inches of free conductor shall be left at each outlet and switch point for the making up of joints or the connection of fixtures or devices, except where conductors are intended to loop without joints through lampholders, receptacles and similar devices.

3007. Boxes at Outlets. Except as permitted in sections 3369 and 4179, a box shall be installed at each outlet, switch, or junction point of conduit, electrical metallic tubing, surface metal raceway, armored cable, non-metallic sheathed or Type MI cable, and at each outlet and switch point of concealed knob-and-tube work.

3008. Boxes and Fittings Where Conductors Are Brought Out. Except as provided in section 3009, a box or terminal fitting having a separately bushed hole for each conductor shall be used wherever a change is made from conduit, electrical metallic tubing, non-metallic sheathed cable, armored cable or Type MI cable and surface metal raceway wiring to open wiring or to concealed knob-and-tube work.

Excerpts from

1956 NATIONAL ELECTRICAL CODE

continued

A fitting used for this purpose shall contain no taps or splices and shall not be used at fixture outlets.

3009. Bushing in Lieu of Box or Fitting. A bushing may be used in lieu of a box or terminal fitting at ends of conduit or electrical metallic tubing where conductors leave the conduit or tubing behind a switchboard, or where more than 4 conductors leave the conduit or tubing at control apparatus or in similar locations, in which case the conductors shall be bunched, taped and painted with insulating paint. Such a bushing shall be of the insulating type except for lead-covered conductors.

3010. Through Studs, Joists and Rafters. When, in exposed or concealed work, conductors in insulating tubes or cables are run through bored holes in studs, joists or similar wood members, holes shall be bored at the approximate centers of wood members, or at least two inches from the nearest edge. Where there is no objection because of weakening the building structure, armored or non-metallic sheathed cable and Type MI cable may be laid in notches in the studding or joists if the cable at those points is protected against the driving of nails into it by having the notch covered with a steel plate at least 1/16 inch in thickness before building finish is applied.

3011. Conductors of Different Systems. Conductors of signal or radio systems shall not occupy the same enclosure with conductors of light or power systems except as permitted for elevators in section 6217; for sound recording in section 6405; for remote-control, low-energy power and signal circuits in sections 7266 and 7292; and communication system in sections 8012 and 8031. Secondary wiring to electric discharge lamps of 1,000 volts or less may occupy the same enclosure as the branch circuit conductors. Conductors of light and power systems of 600 volts or less may occupy the same enclosure, without regard to whether the individual circuits are alternating-current or direct-current, only if all conductors are insulated for the maximum voltage of any conductor within the enclosure. Conductors of light and power systems of over 600 volts shall not occupy the same enclosure with conductors of light and power systems of 600 volts or less. Control, relay and ammeter conductors used in connection with any motor or starter may occupy the same enclosure as the motor circuit conductors.

3012. Number of Conductors in Raceway. In general the percentage of the total interior cross-sectional area of a raceway occupied by conductors shall not be more than will permit a ready installation or withdrawal of the conductors and dissipation of the heat generated without injury to the insulation of the conductors. See the following sections of this code: conduit, section 3466; electrical metallic tubing, 3486; surface metal raceways, 3524; underfloor raceways, 3545; cellular metal floor raceways, 3564; wireways, 3624; auxiliary gutters, 3745; theatres, 5212; signs, 6021-d; elevators, 6213; and sound recording, 6403 and 6404.

3013. Inserting Conductors in Raceways. Raceways shall first be installed as a complete raceway system without the conductors, except those raceways exposed and having a removable cover or capping. As far as possible, conductors shall not be inserted until the interior of the building has been physically protected from the weather, and all mechanical work on the building which is likely to injure the conductors has been completed. Pull wires, if used, shall not be installed until the raceway system is in place. Graphite, talc, or an approved compound may be used as a lubricant in inserting conductors in raceways. Cleaning agents or lubricants having a deleterious effect on conductor covings shall not be used.

3014. Supporting Vertical Conductors in Raceways. Conductors in vertical raceways shall be supported at intervals not greater than those specified in the following table:

No. 18		to No. 0			not greater than	100	feet
No. 00		to No. 0000			not greater than	80	feet
250,000	C. M.	to 350,000	C. M.		not greater than	60	feet
350,001	C. M.	to 500,000	C. M.		not greater than	50	feet
500,001	C. M.	to 750,000	C. M.		not greater than	40	feet
	Above	750,000	C. M.		not greater than	35	feet

The following methods of supporting cables are recommended:

a. By clamping devices constructed of or employing insulating wedges inserted in the ends of the conduits. With cables having varnished cambric or thermoplastic insulation it may also be necessary to clamp the conductor.

b. By inserting boxes at the required intervals in which insulating supports are installed and secured in a satisfactory manner to withstand the weight of the conductors attached thereto, the boxes being provided with covers.

c. In junction boxes, by deflecting the cables not less than 90 degrees and carrying them horizontally to a distance not less than twice the diameter of the cable, the cables being carried on two or more insulating supports, and additionally secured thereto by tie wires if desired.

3015. Raceways Exposed to Different Temperatures. If portions of an interior raceway system are exposed to widely different temperatures, as in refrigerating or cold-storage plants, provision shall be made to prevent circulation of air from a warmer to a colder section through the raceway.

3016. Electrical Continuity of Metal Raceways and Enclosures. Interior metal raceways, cable armor, and other metal enclosures for conductors, shall be metallically joined together into a continuous electrical conductor, and shall be so connected to all boxes, fittings and cabinets as to provide effective electrical continuity.

3017. Grounding Metal Enclosures. Metal raceways, cable armor and fittings shall be grounded if and as prescribed in Article 250.

3018. Alternating-Current Systems in Metal Enclosures. Where run in metal raceway or cable armor, or where a current of more than 50 amperes enters a metal enclosure, the conductors of circuits operating on alternating-current shall be so arranged as to avoid overheating of the metal by induction. If the capacity of a circuit is such that it is impracticable to run all conductors in one enclosure, the circuit may be divided and two or more enclosures may be used providing each phase conductor of the circuit and the neutral conductor, if one is used, are installed in each enclosure. The conductors of such an installation can conform to the provisions of Section 3105 for mutiple conductors.

Induced currents in an enclosure can be avoided by so grouping the conductors in one enclosure that the current in one direction will be substantially equal to the current in the opposite direction.

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In the case of circuits supplying vacuum or electric discharge lighting systems or signs, or X-ray apparatus, and under-plaster extensions permitted by sections 3441 to 3444 inclusive, the currents carried by the conductors are so small that a single conductor may be placed in a metal raceway or cable armor without causing trouble from induction.

Where the conductors of a circuit pass through individual holes in the wall of a metal cabinet, the effect of induction may be minimized by 1—cutting slots in the metal between the individual holes through which the conductors of the circuit pass, or 2—passing all the conductors in the circuit through an insulating block used to cover a hole in the metal cabinet, sufficiently large for all the conductors of the circuit, and providing individual holes in the insulating block for the separate conductors.

3019. Underground Runs. Conductors run underground shall comply with the provisions of sections 2311, 2312 and 2313 as far as mechanical protection is concerned.

3020. Wiring in Ventilating Ducts. Electrical installations shall be so made that the possible spread of fire through fire-stopped partitions, hollow spaces, fire walls or fire partitions, vertical shafts, ventilating or air-conditioning ducts is reduced to a minimum. No wiring system of any type shall be installed in ducts for dust, loose stock or vapor removal. Where it is necessary to run a wiring system through air-conditioning ducts or plenum chambers, the wiring method shall be rigid conduit, flexible steel conduit with lead-covered conductors, or Type ACL armored cable, with fittings suitable for the location. The terminals of circuits of such wiring systems shall be so located that it will not be necessary to install motors or control equipment in the ducts, except for temperature and humidity control. Raceways shall not interfere with the operation of automatic fire dampers in ducts.

The above provisions shall not apply to integral fan systems specifically approved for the purpose.

Consideration should be given to expansion and contraction of runs of conduit from temperature changes.

Article 670

MACHINE TOOLS

General

6701. Scope. The provisions of this article apply to the electrical equipment for motor-driven, complete metal-working machines, not portable by hand, having one or more tool and work holding devices used for progressively removing metal in the form of chips.

6702. Application of Other Articles. The following provisions cover the requirements for electrical wiring and equipment on machine tools within the scope of this article. They are in addition to or amendatory of the applicable provisions of other articles of this code, which apply except as modified in this article.

6703. Identification. Each electrically operated machine tool shall be marked where plainly visible to show the voltage, full-load current and frequency required for each external circuit supplying the machine tool. For a multi-motored machine tool, this full-load current marking shall be not less than the sum of the full-load currents required for all motors which may be in operation at one time under normal conditions of use. If only a single motor is used, the motor nameplate may serve if plainly visible.

6704. Lighting. Lighting fixtures which are a part of or attached to any machine tool shall conform to the following:

a. Voltage. The lighting circuit voltage shall not exceed 150 volts between conductors and shall be a grounded circuit.

b. Flexible Cord. Flexible cord if used shall be of a type suitable for hard usage (see Table 31), and shall be resistant to coolant and oil. It shall be arranged so it cannot be damaged by moving parts of the machine.

Wiring Method

6711. Wiring Method. Conductors shall be in rigid metal conduit or be Type MI cable, except as provided in sections 6712 to 6714 inclusive.

6712. Flexible Metal Conduit. Flexible metal conduit, including the liquid-tight type, may be used only where necessary to employ flexible connections for small or infrequent movements, as at motor terminals.

6713. Continuously Moving Parts. Wiring connections to continuously moving parts of a machine tool shall be of approved type, extra-flexible, non-metallic-covered, multi-conductor cable. Conductors shall conform to section 6722. In lieu of cable, individual conductors enclosed in flexible tubing may be used. The tubing and its fittings shall be approved for the purpose, and conductors in such tubing shall be considered as subject to oil or coolant.

6714. Compartments and Raceways. Compartments and raceways within the framework of a machine tool may be used to enclose conductors, provided they are isolated from coolant and oil reservoirs and are entirely enclosed. Conductors in machine compartments and raceways shall be secured and so arranged that they will not be subject to mechanical injury or abrasion.

6715. Number of Bends in Conduit. If a run of rigid metal conduit does not exceed 25 feet in length, and the conductor fill does not exceed 30 per cent of the cross-sectional area of the conduit, the requirements of section 3471 shall not apply.

Conductors

6721. Sizes Permitted. Circuit and control conductors on or in machines shall not be smaller than No. 14 except as follows:

a. Conductors to Moving Parts. Copper conductors for control purposes to continuously moving parts may be No. 16 if all such conductors are insulated for the maximum voltage of any conductor in the cable or tubing.

b. Conductors to Electronic and Precision Devices. Copper conductors to electronic and precision devices may be No. 20, except if pulled into raceways they shall be not smaller than No. 18.

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6722. Type. Conductors shall be of a type suitable for conditions of use. Flexible, non-metallic, multi-conductor cable shall have an oil- and moisture-resistant insulation with a flame-retardant outer covering.

6723. Identification of Conductors. Conductors shall be identified either by color code or by other distinctive means. White or natural gray coloring shall be used only for a grounded conductor, and green only for a conductor used to ground the frame of equipment.

Control Equipment

6731. Mounting. Controllers shall be mounted in such a manner as to guard against mechanical injury, oil, coolant, dust, and dirt.

6732. In Machine Compartments. Compartments in the column or base of a machine may serve as enclosures for control equipment if the following provisions are complied with:

a. Thickness of Metal. The wall thickness shall be not less than No. 14 USS gauge if of sheet steel, not less than ⅛-inch if of cast metal, or not less than 3/32-inch if of malleable iron.

b. Covers. Compartments shall have tight-fitting hinged covers, not thinner than specified in paragraph a. Covers shall have adequate means for fastening securely in a closed position.

c. Control Enclosures. Compartments used for control enclosures shall be readily accessible and shall not contain moving parts not directly connected to electrical control equipment, and shall be so located as to guard the control devices against oil, coolant, chips, and dirt.

d. Venting. A compartment enclosing group control equipment with branch circuit fusing as specified in paragraph b of section 6742, shall have a clear opening of at least 2 square inches, vented to another compartment within the column or base and having at least one-half the volume of the control compartment.

e. No Floor Opening. Compartments enclosing control equipment shall not be open to the floor or foundation upon which the machine rests.

6733. Not In Machine Compartment. Controllers not in machine compartments shall comply with the following:

a. Controllers with overcurrent protection as permitted by section 6742 may be mounted on the outside of the machine tool or on the floor as close to the machine tool as possible provided the enclosures comply with all the provisions of section 6732.

b. Other controllers may be mounted on the outside of the machine tool or elsewhere if they comply with the provisions of Article 430.

Motor Branch-Circuit Overcurrent Protection

6741. Branch Circuits. Any motor on a machine tool may be supplied from an individual branch circuit in accordance with the provisions of Article 430, or may be connected to a branch circuit which also supplies other motors on the same machine tool in accordance with the provisions of section 4343 or of section 6742. The conductors supplying all motors on a single machine tool may be considered a single branch circuit if all of these motors are protected in accordance with the provisions of section 4343 or of section 6742.

6742. Several Motors on One Branch Circuit. Controllers and running overcurrent protective devices for two or more motors connected to the branch circuit of a single machine tool need not comply with the provisions of section 4343, if all of the following provisions are complied with:

a. Motor-Running Protection. Each motor shall be protected by a motor-running overcurrent protective device.

b. Rating of Overcurrent Devices. The branch circuit shall have overcurrent protection of a rating equal to that specified in section 4342 for the largest motor connected to the circuit, plus an amount equal to the sum of the full-load current ratings of all other motors on the machine tool which may be in operation at one time under normal conditions of use and which are connected to the same circuit. In no case shall overcurrent protection be more than 200 amperes at 250 volts or less, or 100 amperes at 600 volts or less.

c. Enclosures. Enclosures for control equipment and running protective devices enclosed in machine compartments, or mounted on or adjacent to the machine, shall comply in all respects with the provisions of sections 6732 or 6733.

d. Conductors. The conductors of the branch circuit shall comply with the provisions of paragraph b of section 4343.

Protection and Grounding

6751. Protection Against Damage. If the failure of one motor to operate while others continue to run could cause damage, they shall be so connected that the tripping of any overload or undercurrent device will result in stopping all of these motors.

6752. Grounding. All machine tools within the scope of this article, including connected portable equipment, shall be effectively grounded as specified in Article 250.

6753. Moving Parts. A machine part that moves on grounded metal guides or supporting ways shall be considered as adequately grounded if the movable part may not readily be removed by hand.

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Notes to Tables 1, 1a, 2 and 2a on Allowable Current-Carrying Capacities of Insulated Conductors in Amperes

For explanation of Type Letters, and for recognized size of conductors for the various conductor insulations, see sections 3102 and 93101 of the 1956 National Electrical Code. For installation requirements, see section 3102, and the various articles of this code. For flexible cords see Tables 3 and 31.

1. Aluminum Conductors. For aluminum conductors, the allowable current-carrying capacities shall be in accordance with Tables 1a & 2a.

2. Bare Conductors. If bare conductors are used with insulated conductors, their allowable current-carrying capacity shall be limited to that permitted for the insulated conductors of the same size.

3. Application of Table. For open wiring on insulators and for concealed knob-and-tube work, the allowable current-carrying capacities of Table 2 shall be used. For all other recognized wiring methods, the allowable current-carrying capacities of Table 1 shall be used, unless otherwise provided in this code.

The temperature limitation on which the current carrying capacities of Type MI cable are based, is determined by the insulating materials used in the end seal. Termination fittings incorporating unimpregnated organic insulating materials are limited to 85° C. operation.

4. More Than Three Conductors in a Raceway. Table 1 gives the allowable current-carrying capacity for not more than three conductors in a raceway or cable. If the number of conductors in a raceway or cable is from 4 to 6, the allowable current-carrying capacity of each conductor shall be reduced to 80 per cent of the values in Table 1. If the number of conductors in a raceway or cable is from 7 to 9, the allowable current-carrying capacity of each conductor shall be reduced to 70 per cent of the values in Table 1.

Exceptions to the foregoing are specified in sections 3624, 3745, and 7265 of the 1956 National Electrical Code.

If Type RH-RW rubber insulated wire is used in wet locations the allowable current carrying capacities shall be that of Column 2 in Tables 1 and 2. If used in dry locations the allowable current carrying capacities shall be that of Column 3 in Tables 1 and 2.

5. Neutral Conductor. A neutral conductor which carries only the unbalanced current from other conductors, as in the case of normally balanced circuits of three or more conductors, shall not be counted in determining current-carrying capacities as provided for in the preceding paragraph.

In a 3-wire circuit consisting of two phase wires and the neutral of a 4-wire, 3-phase system, a common conductor carries approximately the same current as the other conductors and is not therefore considered as a neutral conductor.

6. Ultimate Insulation Temperature. In no case shall conductors be associated together in such a way with respect to the kind of circuit, the wiring method employed, or the number of conductors, that the limiting temperature of the conductors will be exceeded.

7. Use of Conductors With Higher Operating Temperatures. If the room temperature is within 10 degrees C of the maximum allowable operating temperature of the insulation, it is desirable to use an insulation with a higher maximum allowable operating temperature; although insulation can be used in a room temperature approaching its maximum allowable operating temperature limit if the current is reduced in accordance with the table of correction factors for different room temperatures.

8. Voltage Drop. The allowable current-carrying capacities in Tables 1 and 2 are based on temperature alone and do not take voltage drop into consideration.

9. Overcurrent Protection. If the standard ratings and settings of overcurrent devices do not correspond with the ratings and settings allowed for conductors, the next higher standard rating and setting may be used, but not exceeding 150 per cent of the allowable carrying capacity of the conductor.

10. Deterioration of Insulation. It should be noted that even the best grades of rubber insulation will deteriorate in time so eventually will need to be replaced.

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Table 1—Allowable Current-Carrying Capacities of Insulated Conductors in Amperes

Not More Than Three Conductors in Raceway or Cable or Direct Burial.
(Based on Room Temperature of 30 C. 86 F.)

Size AWG MCM	Rubber Type R Type RW Type RU Type RUW (14-2) / Thermoplastic Type T Type TW	Rubber Type RH	Paper: Thermoplastic Asbestos Type TA / Var-Cam Type V / Asbestos Var-Cam Type AVB	Asbestos Var-Cam Type AVA Type AVL	Impregnated Asbestos Type AI (14-8) Type AIA	Asbestos Type A (14-8) Type AA
14	15	15	25	30	30	30
12	20	20	30	35	40	40
10	30	30	40	45	50	55
8	40	45	50	60	65	70
6	55	65	70	80	85	95
4	70	85	90	105	115	120
3	80	100	105	120	130	145
2	95	115	120	135	145	165
1	110	130	140	160	170	190
0	125	150	155	190	200	225
00	145	175	185	215	230	250
000	165	200	210	245	265	285
0000	195	230	235	275	310	340
250	215	255	270	315	335	...
300	240	285	300	345	380	...
350	260	310	325	390	420	...
400	280	335	360	420	450	...
500	320	380	405	470	500	...
600	355	420	455	525	545	...
700	385	460	490	560	600	...
750	400	475	500	580	620	...
800	410	490	515	600	640	...
900	435	520	555	...	....	...
1,000	455	545	585	680	730	...
1,250	495	590	645	...	...	...
1,500	520	625	700	785	...	...
1,750	545	650	735	...	...	...
2,000	560	665	775	840	...	...

CORRECTION FACTOR FOR ROOM TEMPERATURES OVER 30 C. 86 F.

C.	F.						
40	104	.82	.88	.90	.94	.95	...
45	113	.71	.82	.85	.90	.92	...
50	122	.58	.75	.80	.87	.89	...
55	131	.41	.67	.74	.83	.86	...
60	140	...	.58	.67	.79	.83	.91
70	158	...	.35	.52	.71	.76	.87
75	167	...	...	.43	.66	.72	.86
80	176	...	...	.30	.61	.69	.84
90	194	...	...	...	.50	.61	.80
100	212	...	...	...	...	.51	.77
120	248	...	...	...	...	...	.69
140	284	...	...	...	...	...	.59

See notes, following table 2.

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Table 2—Allowable Current-Carrying Capacities of Insulated Copper Conductors in Amperes

Single Conductor in Free Air

(Based on Room Temperature of 30 C. 86 F.)

Size AWG MCM	Rubber Type R Type RW Type RU Type RUW (14-2) / Thermoplastic Type T Type TW	Rubber Type RH	Thermoplastic Asbestos Type TA / Var-Cam Type V / Asbestos Var-Cam Type AVB	Asbestos Var-Cam Type AVA Type AVL	Impregnated Asbestos Type AI (14-8) Type AIA	Asbestos Type A (14-8) Type AA	Slow-Burning Type SB / Weather-proof Type WP Type SBW
14	20	20	30	40	40	45	30
12	25	25	40	50	50	55	40
10	40	40	55	65	70	75	55
8	55	65	70	85	90	100	70
6	80	95	100	120	125	135	100
4	105	125	135	160	170	180	130
3	120	145	155	180	195	210	150
2	140	170	180	210	225	240	175
1	165	195	210	245	265	280	205
0	195	230	245	285	305	325	235
00	225	265	285	330	355	370	275
000	260	310	330	385	410	430	320
0000	300	360	385	445	475	510	370
250	340	405	425	495	530	....	410
300	375	445	480	555	590	....	460
350	420	505	530	610	655	....	510
400	455	545	575	665	710	....	555
500	515	620	660	765	815	....	630
600	575	690	740	855	910	....	710
700	630	755	815	940	1005	....	780
750	655	785	845	980	1045	....	810
800	680	815	880	1020	1085	....	845
900	730	870	940	....	....	....	905
1000	780	935	1000	1165	1240	....	965
1250	890	1065	1130	....	....	....	....
1500	980	1175	1260	1450	....	....	1215
1750	1070	1280	1370	....	....	....	....
2000	1155	1385	1470	1715	....	....	1405

CORRECTION FACTOR FOR ROOM TEMPERATURES OVER 30 C. 86 F.

C.	F.							
40	104	.82	.88	.90	.94	.95	....	....
45	113	.71	.82	.85	.90	.92	....	....
50	122	.58	.75	.80	.87	.89	....	....
55	131	.41	.67	.74	.83	.86	....	....
60	140	....	.58	.67	.79	.83	.91	....
70	158	....	.35	.52	.71	.76	.87	....
75	167	....	....	.43	.66	.72	.86	....
80	176	....	....	.30	.61	.69	.84	....
90	194	....	....	....	.50	.61	.80	....
100	212	....	....	....	....	.51	.77	....
120	248	....	....	....	....	.....	.69	....
140	284	....	....	....	....	....	.59	....

See notes, following this table.

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Table 1a—Allowable Current-Carrying Capacities of Insulated Aluminum Conductors in Amperes

Not More than Three Conductors in Raceway or Cable or Direct Burial (Based on Room Temperature of 30° C. 86° F.)

Size AWG MCM	Rubber Type R, RW, RU, RUW (12-2) / Type RH-RW Note 4a. / Thermoplastic Type T, TW	Rubber Type RH / RUH (14-2) / Type RH-RW Note 4a. / Type RHW	Thermoplastic Asbestos Type TA / Var-Cam Type V / Asbestos Var-Cam Type AVB / MI Cable / RHH†	Asbestos Var-Cam Type AVA Type AVL	Impregnated Asbestos Type AI (14-8) Type AIA	Asbestos Type A (14-8) Type AA
12	15	15	25	25	30	30
10	25	25	30	35	40	45
8	30	40	40	45	50	55
6	40	50	55	60	65	75
4	55	65	70	80	90	95
3	65	75	80	95	100	115
*2	75	90	95	105	115	130
*1	85	100	110	125	135	150
*0	100	120	125	150	160	180
*00	115	135	145	170	180	200
*000	130	155	165	195	210	225
*0000	155	180	185	215	245	270
250	170	205	215	250	270	....
300	190	230	240	275	305	....
350	210	250	260	310	335	....
400	225	270	290	335	360	....
500	260	310	330	380	405	....
600	285	340	370	425	440	....
700	310	375	395	455	485	....
750	320	385	405	470	500	....
800	330	395	415	485	520	....
900	355	425	455	....	....	....
1000	375	445	480	560	600	....
1250	405	485	530	....	....	....
1500	435	520	580	650	....	....
1750	455	545	615	....	....	....
2000	470	560	650	705	....	....
CORRECTION FACTORS, ROOM TEMPS. OVER 30° C. 86° F.						
C. F.						
40 104	.82	.88	.90	.94	.95	....
45 113	.71	.82	.85	.90	.92	....
50 122	.58	.75	.80	.87	.89	....
55 131	.41	.67	.74	.83	.86	....
60 140	....	.58	.67	.79	.83	.91
70 158	....	.35	.52	.71	.76	.87
75 167	....	....	.43	.66	.72	.86
80 176	....	....	.30	.61	.69	.84
90 194	....	....	....	.50	.61	.80
100 212	....	....	....	...	.51	.77
120 248	....	....	....	....	....	.69
140 284	....	....	....	....	....	.59

See notes, following table 2a.

*For three wire, single phase service and sub-service circuits, the allowable current-carrying capacity of RH, RH-RW, RHH and RHW aluminum conductors shall be for sizes #2-100 Amp., #1-110 Amp., #1/0-125 Amp., #2/0-150 Amp., #3/0-170 Amp. and #4/0-200 Amp.

†The current-carrying capacities for Type RHH conductors for sizes AWG 12, 10 and 8 shall be the same as designated for Type RH conductors in this Table.

Table 2a—Allowable Current-Carrying Capacities of Insulated Aluminum Conductors in Amperes

Single Conductor in Free Air
(Based on Room Temperature of 30° C. 86° F.)

Size AWG MCM	Rubber Type R, RW, RU, RUW (12-2) / Type RH-RW Note 4a. / Thermo-plastic Type T, TW	Rubber Type RH / RUH (14-2) / Type RH-RW Note 4a. / Type RHW	Thermo-plastic Asbestos Type TA / Var-Cam Type V / Asbestos Var-Cam Type AVB / MI Cable / RHH†	Asbestos Var-Cam Type AVA Type AVL	Impreg-nated Asbestos Type AI (14-8) Type AIA	Asbestos Type A (14-8) Type AA	Slow-Burning Type SB / Weather-proof Type WP
12	20	20	30	40	40	45	30
10	30	30	45	50	55	60	45
8	45	55	55	65	70	80	55
6	60	75	80	95	100	105	80
4	80	100	105	125	135	140	100
3	95	115	120	140	150	165	115
2	110	135	140	165	175	185	135
1	130	155	165	190	205	220	160
0	150	180	190	220	240	255	185
00	175	210	220	255	275	290	215
000	200	240	255	300	320	335	250
0000	230	280	300	345	370	400	290
250	265	315	330	385	415	....	320
300	290	350	375	435	460	....	360
350	330	395	415	475	510	....	400
400	355	425	450	520	555	....	435
500	405	485	515	595	635	....	490
600	455	545	585	675	720	....	560
700	500	595	645	745	795	....	615
750	515	620	670	775	825	....	640
800	535	645	695	805	855	....	670
900	580	700	750	....	....	....	725
1000	625	750	800	930	990	....	770
1250	710	855	905	....	....	....	....
1500	795	950	1020	1175	....	....	985
1750	875	1050	1125	....	....	....	....
2000	960	1150	1220	1425	....	....	1165

CORRECTION FACTORS, ROOM TEMPS. OVER 30° C. 86° F.

C. F.							
40 104	.82	.88	.90	.94	.95	....	....
45 113	.71	.82	.85	.90	.92	....	....
50 122	.58	.75	.80	.87	.89	....	....
55 131	.41	.67	.74	.83	.86	....	....
60 140	....	.58	.67	.79	.83	.91	....
70 158	....	.35	.52	.71	.76	.87	....
75 167	....	....	.43	.66	.72	.86	....
80 176	....	....	.30	.61	.69	.84	....
90 194	....	....	....	.50	.61	.80	....
100 212	....	....	....	....	.51	.77	....
120 248	....	....	....	....	....	.69	....
140 284	....	....	....	....	....	.59	....

See notes, following table 2a.

*For three wire, single phase service and sub-service circuits, the allowable current-carrying capacity of RH, RH-RW, RHH and RHW aluminum conductors shall be for sizes #2-100 Amp., #1-110 Amp., #1/0-125 Amp., #2/0-150 Amp., #3/0-170 Amp. and #4/0-200 Amp.

†The current-carrying capacities for Type RHH conductors for sizes AWG 12, 10 and 8 shall be the same as designated for Type RH conductors in this Table.

CONDUCTOR INSULATIONS

Trade Name	Type Letter	Insulation	Thickness of Insulation	Outer Covering
Rubber-Covered Fixture Wire Solid or 7-Strand	RF-1	Code Rubber	18 ... 1/64 Inch	Non-metallic covering
	RF-2	Code Rubber	18-16 ... 2/64 Inch	Non-metallic covering
		Latex Rubber	18-16 ... 18 Mils	
Rubber-Covered Fixture Wire Flexible Stranding	FF-1	Code Rubber	18 ... 1/64 Inch	Non-metallic covering
	FF-2	Code Rubber	18-16 ... 2/64 Inch	Non-metallic covering
		Latex Rubber	18-16 ... 18 Mils	
Heat Resistant Rubber-Covered Fixture Wire Solid or 7-Strand	RFH-1	Heat-Resistant Rubber	18 ... 1/64 Inch	Non-metallic covering
	RFH-2	Heat-Resistant Rubber	18-16 ... 2/64 Inch	Non-metallic covering
		Heat-Resistant Latex Rubber	18-16 ... 18 Mils	
Heat Resistant Rubber-Covered Fixture Wire Flexible Stranding	FFH-1	Heat-Resistant Rubber	18 ... 1/64 Inch	Non-metallic covering
	FFH-2	Heat-Resistant Rubber	18-16 ... 2/64 Inch	Non-metallic covering
		Heat-Resistant Latex-Rubber	18-16 ... 18 Mils	
Thermoplastic-Covered Fixture Wire—Solid or Stranded	TF	Thermoplastic	18-16 ... 2/64 Inch	None
Thermoplastic-Covered Fixture Wire—Flexible Stranding	TFF	Thermoplastic	18-16 ... 2/64 Inch	None
Cotton-Covered, Heat-Resistant, Fixture Wire	CF	Impregnated Cotton	18-14 ... 2/64 Inch	None
Asbestos-Covered, Heat-Resistant, Fixture Wire	AF	Impregnated Asbestos	18-14 ... 2/64 Inch	None
Code	R	Code Rubber	14-12 ... 2/64 Inch 10 ... 3/64 Inch 8-2 ... 4/64 Inch 1-4/0 ... 5/64 Inch 213-500 ... 6/64 Inch 501-1000 ... 7/64 Inch 1001-2000 ... 8/64 Inch	Moisture-resistant, flame-retardant, non-metallic covering
Heat-Resistant	RH	Heat-Resistant Rubber	14-12 ... 2/64 Inch 10 ... 3/64 Inch 8-2 ... 4/64 Inch 1-4/0 ... 5/64 Inch 213-500 ... 6/64 Inch 501-1000 ... 7/64 Inch 1001-2000 ... 8/64 Inch	Moisture-resistant, flame-retardant, non-metallic covering
Moisture-Resistant	RW	Moisture-Resistant Rubber	14-10 ... 3/64 Inch 8-2 ... 4/64 Inch 1-4/0 ... 5/64 Inch 213-500 ... 6/64 Inch 501-1000 ... 7/64 Inch 1001-2000 ... 8/64 Inch	Moisture-resistant, flame-retardant, non-metallic covering
Moisture and Heat Resistant	RH-RW	Moisture and Heat Resistant Rubber	14-10 ... 3/64 Inch 8-2 ... 4/64 Inch 1-4/0 ... 5/64 Inch 213-500 ... 6/64 Inch 501-1000 ... 7/64 Inch 1001-2000 ... 8/64 Inch	Moisture-resistant, flame retardant, non-metallic covering.
Moisture and Heat-Resistant	RHW	Moisture and Heat Resistant Rubber	14-10 ... 3/64 Inch 8-2 ... 4/64 Inch 1-4/0 ... 5/64 Inch 213-500 ... 6/64 Inch 501-1000 ... 7/64 Inch 1001-2000 ... 8/64 Inch	Moisture-resistant, flame retardant, non-metallic covering
Latex Rubber	RU	90% Unmilled, Grainless Rubber	14-10 ... 18 Mils 8-2 ... 25 Mils	Moisture-resistant, flame-retardant, non-metallic
	RUW	90% Unmilled, Grainless Rubber	14-10 ... 18 Mils 8-2 ... 25 Mils	Moisture-resistant, flame-retardant, non-metallic
Heat Resistant Latex Rubber	RUH	90% Unmilled, Grainless Rubber	14-10 ... 18 Mils 8-2 ... 25 Mils	Moisture-resistant, flame-retardant, non-metallic

CONDUCTOR INSULATIONS

Trade Name	Type Letter	Insulation	Thickness of Insulation	Outer Covering
Thermoplastic	T	Flame-Retardant, Thermoplastic Compound	14–10 ... 2/64 Inch 8 ... 3/64 Inch 6–2 ... 4/64 Inch 1–4/0 ... 5/64 Inch 213–500 ... 6/64 Inch 501–1000 ... 7/64 Inch 1001–2000 ... 8/64 Inch	None
Moisture-Resistant Thermoplastic	TW	Flame-Retardant, Moisture-Resistant Thermoplastic	14–10 ... 2/64 Inch 8 ... 3/64 Inch 6–2 ... 4/64 Inch 1–4/0 ... 5/64 Inch 213–500 ... 6/64 Inch 501–1000 ... 7/64 Inch 1001–2000 ... 8/64 Inch	None
Thermoplastic and Asbestos	TA	Thermoplastic and Asbestos	Th'pl'. Asb. 14–8 ... 20 Mils 20 Mils 6–2 ... 30 Mils 25 Mils 1–4/0 ... 40 Mils 30 Mils	Flame-retardant, cotton braid
Mineral-Insulated Metal-Sheathed	MI	Magnesium Oxide	16–4 ... 50 Mils 3–4/0 ... 55 Mils	Copper
Varnished Cambric	V	Varnished Cambric	14–8 ... 3/64 Inch 6–2 ... 4/64 Inch 1–4/0 ... 5/64 Inch 213–500 ... 6/64 Inch 501–1000 ... 7/64 Inch 1001–2000 ... 8/64 Inch	Non-metallic covering or lead sheath
Asbestos and Varnished Cambric	AVA and AVL	Impregnated Asbestos and Varnished Cambric	(Dimensions in Mils) VC / AVA Asb. / AVL Asb. 14–8 (solid only) 30 / 20 / 25	AVA-asbestos braid
			1st Asb. / VC / AVA 2nd Asb. / AVL 2nd Asb. 14–8 ... 10 / 30 / 15 / 25 6–2 ... 15 / 30 / 20 / 25 1–4/0 ... 20 / 30 / 30 / 30 213–500 ... 25 / 40 / 40 / 40 501–1000 ... 30 / 40 / 40 / 40 1001–2000 ... 30 / 50 / 50 / 50	AVL-asbestos braid and lead sheath
Asbestos and Varnished Cambric	AVB	Impregnated Asbestos and Varnished Cambric	VC / Asb. 18–8 ... 30 / 20 6–2 ... 40 / 30 1–4/0 ... 40 / 40	Flame-retardant, cotton braid (switchboard wiring)
			Asb. / VC / 2nd Asb. 14–8 ... 10 / 30 / 15 6–2 ... 15 / 30 / 20 1–4/0 ... 20 / 30 / 30 213–500 ... 25 / 40 / 40 501–1000 ... 30 / 40 / 40 1001–2000 ... 30 / 50 / 50	Flame-retardant, cotton braid
Asbestos	A	Asbestos	14 ... 30 Mils 12–8 ... 40 Mils	Without asbestos braid
Asbestos	AA	Asbestos	14 ... 30 Mils 12–8 ... 30 Mils 6–2 ... 40 Mils 1–4/0 ... 60 Mils	With asbestos braid
Asbestos	AI	Impregnated Asbestos	14 ... 30 Mils 12–8 ... 40 Mils	Without asbestos braid
Asbestos	AIA	Impregnated Asbestos	Sol. / Str. 14 ... 30 Mils / 30 Mils 12–8 ... 30 Mils / 40 Mils 6–2 ... 40 Mils / 60 Mils 1–4/0 ... 60 Mils / 75 Mils 213–500 ... 90 Mils 501–1000 ... 105 Mils	With asbestos braid
Paper		Paper		Lead sheath
Slow Burning	SB	3 Braids Impregnated Fire Retardant, Cotton Thread	14–10 ... 3/64 Inch 8–2 ... 4/64 Inch 1–4/0 ... 5/64 Inch 213–500 ... 6/64 Inch 501–1000 ... 7/64 Inch 1001–2000 ... 8/64 Inch	Outer cover finished smooth and hard
Slow-Burning Weatherproof	SBW	2 Layers Impregnated Cotton Thread	14–10 ... 3/64 Inch 8–2 ... 4/64 Inch 1–4/0 ... 5/64 Inch 213–500 ... 6/64 Inch 501–1000 ... 7/64 Inch 1001–2000 ... 8/64 Inch	Outer fire-retardant coating
Weatherproof	WP	At least 3 Impregnated Cotton Braids or Equivalent		

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TABLE 31—FLEXIBLE CORD

Trade Name	Type Letter	Size AWG	No. of Conductors	Insulation	Braid on Each Conductor	Outer Covering	Use		
Parallel Tinsel Cord	TP See Note 3	27	2	Rubber	None	Rubber	Attached to an Appliance	Damp Places	Not Hard Usage
	TPT See Note 3	27	2	Thermo-plastic	None	Thermo-plastic	Attached to an Appliance	Damp Places	Not Hard Usage
Jacketed Tinsel Cord	TS See Note 3	27	2 or 3	Rubber	None	Rubber	Attached to an Appliance	Damp Places	Not Hard Usage
	TST See Note 3	27	2 or 3	Thermo-plastic	None	Thermo-plastic	Attached to an Appliance	Damp Places	Not Hard Usage
Asbestos-Covered Heat-Resistant Cord	AFC	18, 16 14	2 or 3	Impregnated Asbestos	Cotton or Rayon	None	Pendant	Dry Places	Not Hard Usage
	AFPO		2						
	AFPD		2 or 3		None	Cotton, Rayon or Saturated Asbestos			
Cotton-Covered Heat Resistant Cord	CFC	18, 16 14	2 or 3	Impregnated Cotton	Cotton or Rayon	None	Pendant	Dry Places	Not Hard Usage
	CFPO		2						
	CFPD		2 or 3		None	Cotton or Rayon			
Parallel Cord	PO–1	18	2	Rubber	Cotton	Cotton or Rayon	See Note2	Dry Places	Not Hard Usage
	PO–2	18, 16					Pendant or Port.		
	PO	14 & over							
All Rubber Parallel Cord	SP–1	18	2	Rubber	None	Rubber	Pendant or Portable	Damp Places	Not Hard Usage
	SP–2	18, 16							
All Plastic Parallel Cord	SPT-1	18	2	Thermo-plastic	None	Thermoplastic	Pendant or Portable	Damp Places	Not Hard Usage
	SPT-2	18, 16							
Lamp Cord	C	18 & over	2 or more	Rubber	Cotton	None	Pendant or Port.	Dry Places	NotHard Use
Armored Cord	CA	18, 16 14	2	Rubber	Cotton	Fibrous and Metal Armor	Pendant or Port.	Dry Places	Hard Usage
Twisted Portable Cord	PD	18 & over	2 or more	Rubber	Cotton	Cotton or Rayon	Pendant or Port.	Dry Places	NotHard Usage
Reinforced Cord	P–1	18	2 or more	Rubber	Cotton	Cotton over Rubber Filler	Pendant or Portable	Dry Places	NotHard Use
	P–2	18, 16							
	P	14 & over							Hard Usage
Moisture-Proof Reinforced Cord	PW–1	18	2 or more	Rubber	Cotton	Cotton, Moisture-Resistant Finish over Rubber Filler	Pendant or Port.	Damp Places	NotHard Use
	PW–2	18, 16							
	PW	14 & over							Hard Usage
Braided Heavy Duty Cord	K See Note 4	18 and over	2 or more	Rubber	Cotton	Two Cotton, Moisture-Resistant Finish See Note 5	Pendant or Portable	Damp Places	Hard Usage
Vacuum Cleaner Cord	SV	18	2	Rubber	None	Rubber	Pendant or Portable	Damp Places	Hard Usage
	SVT			Thermopl'		Thermoplastic			

TABLE 31—FLEXIBLE CORD

Trade Name	Type Letter	Size AWG	No. of Conductors	Insulation	Braid on Each Conductor	Outer Covering	Use		
Junior Hard Service Cord	SJ	18, 16	2, 3 or 4	Rubber	None	Rubber	Pendant or Portable	Damp Places	Hard Usage
	SJO					Oil Resist. Compound			
	SJT			Thermopl' or Rubber		Thermoplastic			
Hard Service Cord	S See Note 6	18 to 10 incl.	2 or more	Rubber	None	Rubber	Pendant or Portable	Damp Places	Extra Hard Usage
	SO					Oil Resist. Compound			
	ST			Thermopl' or Rubber		Thermoplastic			
Rubber-Jacketed Heat-Resistant Cord	AFSJ	18, 16	2 or 3	Impregnated Asbestos	None	Rubber	Portable	Damp Places	Portable Heaters
	AFS	18, 16, 14							
Heater Cord	HC	18–12	2,3 or 4	Rubber & Asbestos	Cotton	None	Portable	Dry Places	Portable Heaters
	HPD				None	Cotton or Rayon			
Rubber Jacketed Heater Cord	HSJ	18–16		Rubber & Asbestos	None	Cotton and Rubber	Portable	Damp Places	Portable Heaters
Jacketed Heater Cord	HS	14–12	2, 3, or 4	Rubber and Asbestos	None	Cotton, and Rubber or Neoprene	Portable	Damp Places	Portable Heaters
All-Neoprene Heater Cord	HPN	18–16	2	Neoprene	None	Neoprene	Portable	Damp Places	Portable Heaters
Heat & Moisture Resistant Cord	AVPO	18 to 10 incl.	2	Asbestos & Var. Comb.	None	Asbestos, Flame-Ret. Moisture Resist.	Pendant or Portable	Damp Places	Not Hard Usage
	AVPD		2 or 3						
Range Cable	SR	8–4	3 or 4	Rubber	None	Rubber or Neoprene	Portable	Damp Places	Ranges
	SRT	8–4	3 or 4	Thermoplastic	None	Thermoplastic	Portable	Damp Places	Ranges
Elevator Cable	E See Note 7	20–14	2 or more	Rubber	Cotton	Three Cotton, Outer one Flame-Retardant & Moisture Resist. See Note 5 One Cotton and a Neoprene Jacket See Note 5	Elevator Lighting and Control	Non-Hazardous Locations	
	EO See Note 7							Hazardous Locations	
	ET See Note 7	20–14		Thermoplastic	Rayon	Three cotton, Outer one Flame-Retardant & Moisture Resistant. See Note 5		Non-Hazardous Locations	

NOTES TO TABLE 31

1. Except for Types AFPO, CFPO, PO-1, PO-2, PO, SP-1, SP-2, SPT-1, SPT-2, TP, TPT, and AVPO, individual conductors are twisted together.

2. Type PO-1 is for use only with portable lamps, portable radio receiving appliances, portable clocks and similar appliances which are not liable to be moved frequently and where appearance is a consideration.

3. Types TP, TPT, TS, and TST are suitable for use in lengths not exceeding eight feet when attached directly, or by means of a special type of plug, to a portable appliance rated at 50 watts or less and of such nature that extreme flexibility of the cord is essential.

4. Type K is suitable for use on theatre stages.

5. Rubber-filled or varnished cambric tapes may be substituted for the inner braids.

6. Types S, SO and ST are suitable for use on theatre stages, in garages and elsewhere, where flexible cords are permitted by this code.

7. Traveling cables for operating, control and signal circuits may have one or more non-metallic fillers or may have a supporting filler of stranded steel wires having its own protective braid or cover. Cables exceeding 100 feet in length shall have steel supporting fillers, except in locations subject to excessive moisture or corrosive vapors or gases.

Where steel supporting fillers are used, they shall run straight through the center of the cable assembly and shall not be cabled with the copper strands of any conductor.

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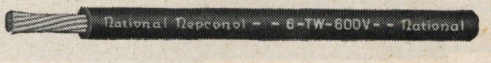
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NATIONAL ELECTRIC BUILDING WIRE

TYPE TW—FOR WET LOCATIONS

600 Volts—60° C. (140° F.)

Listed by the Underwriters' Laboratories, Inc.



National Electric's Nepconol superior building wires and cables are for general use in wet or dry locations. Thermoplastic insulation resists moisture, flame, acids, alkalies, oil and abrasion.

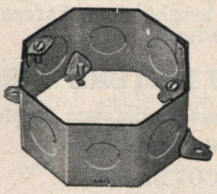
Solid Conductors

Size A.W.G.	Strands	Insulation Thickness Inches	Normal Overall Diam	Approx. Net Wt.Lbs. Per M Ft.	Std. Pkg. Feet (Coil)	Approx. Shpg. Wt.Lbs. Std.Pkg.
14	Solid	2/64	.130	20	500	11
12	Solid	2/64	.150	28	500	15
10	Solid	2/64	.170	41	500	22
8	Solid	3/64	.230	69	500	36
		Stranded Conductors				
14	7x.0242	2/64	.140	22	500	12
12	7x.0305	2/64	.158	30	500	16
10	7x.0385	2/64	.185	44	500	23
8	7x.0486	3/64	.250	75	500	39
6	7x.0612	4/64	.320	119	500	61
4	7x.0772	4/64	.365	176	500	89
					(Reel)	
2	7x.0974	4/64	.425	263	1000	326
1	19x.0664	5/64	.500	339	1000	402
1/0	19x.0745	5/64	.545	416	1000	479
2/0	19x.0837	5/64	.590	514	1000	577
3/0	19x.0940	5/64	.640	633	1000	696
4/0	19x.1055	5/64	.700	787	1000	850

Note: This same type cable is available in the circular mil (CM) sizes for open wiring only.

NATIONAL ELECTRIC "REDEGE" CONCRETE BOXES

Galvanized Finish Only



4-inch Octagon Concrete Boxes are furnished as a Ring and Back Plate separately. Galvanized finish only. Row of ½-inch knockouts and ¾-inch deep boxes, and in 3½-inch deep boxes, and rows of ½-inch and ¾-inch and ¾-inch and 1-inch knockouts in 4-inch and deeper boxes.

Concrete Box Rings Only

Cat. No.	Universal No.	Depth. In.	Knockouts, Inches	Std. Pkg.	Wt.Lbs. Std.Pkg.
3202	54531	2	4—½ & 4—¾	10	6
3202½	54541	2½	4—½ & 4—¾	10	8
3302	54551	3	4—½ & 4—¾	10	10
3304	54551	3	4—¾ & 4—1	10	10
3402	54561	3½	4—½ & 4—¾	10	11
3404	54561	3½	4—¾ & 4—1	10	11
3502	54571	4	4—½ & 4—¾	10	12
3504	54571	4	4—¾ & 4—1	10	12
			Back Plates Only		
3100	.....	...	3—½ & 2—¾	50	18
3101*	.....	...	2—½ & 2—¾	50	21

4—10/24 screws furnished with Rings.
*No. 3101 is furnished with ⅜-inch stud.

NATIONAL ELECTRIC BUILDING CABLE

TYPES RL AND RHL

"DILEC" SAFECOTE RUBBER INSULATED LEAD COVERED BUILDING-TYPE CABLE

600 VOLTS

The suffixes L, DL, and ML are added to designate single, two (duplex) and three (multiple) conductor Lead-Covered Cables respectively. One, two and three conductor cables, for example, bear the respective Type designation RL, RDL and RML. Moisture Resistant Grade Trade RW rubber is not used in Lead-Covered Cables because in the Fibrous-Covered form Type RW wire can be substituted for Lead-Covered Cable for use in "wet locations."

A properly applied lead sheath is completely moisture-proof and is highly resistant to most forms of corrosion. The lead sheath on National Electric Cables is applied over the cable in a hydraulic press at a pressure of approximately 50,000 pounds per square inch and at a temperature of approximately 300° F., at which temperature the lead is in a semi-plastic state. Various features of the process insure the formation of an oxide-free sheath without flow-lines and laminations.

Single Conductor — Solid

Size A.W.G. or C.M.	Thickness Inches Rubber	Lead	Approx. O.D. Inches	Std.Pkg. Feet (Reel)	Approx Shpg. Wt. Lbs. Per M Ft.
*‡18	2/64	—2/64	.19	1000	92
*‡16	2/64	—2/64	.20	1000	100
14	2/64	—2/64†	.22	**1000	114
12	2/64	—2/64†	.24	**1000	131
10	3/64	—3/64	.32	**1000	260
8	4/64	—3/64	.38	1000	320
		Single Conductors—Stranded			
14	2/64	—2/64†	.23	**1000	119
12	2/64	—2/64†	.25	**1000	136
10	3/64	—3/64	.32	**1000	274
8	4/64	—3/64	.38	1000	337
6	4/64	—4/64††	.47	1000	548
4	4/64	—4/64††	.52	1000	655
2	4/64	—4/64	.58	1000	770
1	5/64	—4/64	.64	1000	930
1/0	5/64	—4/64	.68	1000	1060
2/0	5/64	—4/64	.73	1000	1210
3/0	5/64	—4/64	.78	1000	1370
4/0	5/64	—4/64†	.84	1000	1570
250,000	6/64	—5/64	.95	1000	2030
300,000	6/64	—5/64	1.00	1000	2270
350,000	6/64	—5/64	1.06	1000	2490
400,000	6/64	—5/64	1.10	1000	2720
500,000	6/64	—5/64	1.19	1000	3160
600,000	7/64	—6/64	1.33	500	3980
700,000	7/64	—6/64	1.40	500	4420
750,000	7/64	—6/64	1.43	500	4620
800,000	7/64	—6/64	1.47	500	4850
900,000	7/64	—6/64	1.53	500	5265
1,000,000	7/64	—6/64	1.59	500	5690

*Not listed by Underwriters' Laboratories.
‡For 300-volt service.
†I.P.C.E.A. and A.S.T.M. Specifications require 1/64th-inch heavier lead sheath.
††I.P.C.E.A. and A.S.T.M. Specifications permit 1/64-inch lighter lead sheath.
**Standard Package for one conductor No. 14, 12, 10 is 1000 ft. lengths on non-returnable reels.

NATIONAL ELECTRIC WIRES
TYPE RH—"DILEC" SAFECOTE BUILDING WIRE
Listed by Underwriters' Laboratories, Inc.



600 Volt Service—Heat Resistant Grade
Conforming to all requirements of Federal Specification J-C-103 Amendment 5 of May 27, 1948.

SINGLE FIBROUS COVERING

Furnished only in sizes No. 14 and 12 where it is desirable to keep the overall diameter down to a minimum. Reference to the previous page wi'l show that dual rated wire in these sizes has 1/64" more insulation. This is necessary because the code requires 3/64" insulation on sizes No. 14 and 12 Type RW wire.

Cond. Size AWG or CM	No. and Size of Strands	Thick. of Insu- lation in 64ths	Aprox. Over- all Dia.	Aprox. Net Wt. Lbs. per M Ft.	Standard Pkg.	Approx. Shp. Wt. Std. Pkg. Lbs.
			SOLID CONDUCTORS			
14	1x.0641"	2	.153"	23	500' Coil in Carton	13
12	1x.0808"	2	.170"	32	500' Coil in Carton	17
			STRANDED CONDUCTORS			
14	7x.0242"	2	.161"	24	500' Coil in Carton	14
12	7x.0305"	2	.180"	33	500' Coil in Carton	18

DOUBLE FIBROUS COVERING

			SOLID CONDUCTORS			
14	1x.0641"	2	.169"	26	500' Coil Wrapped	14
12	1x.0808"	2	.186"	36	500' Coil Wrapped	19
			STRANDED CONDUCTORS			
14	7x.0242"	2	.177"	27	500' Coil Wrapped	15
12	7x.0305"	2	.196"	37	500' Coil Wrapped	20

TYPE RW-60° C OR RH- 75° C "DILEC" "SAFECOTE" BUILDING WIRE
600 V. SERVICE—HEAT & MOISTURE RESISANT GRADE
Conforming to all requirements of Federal Specification J-C-103 Amendment 5 of May 27, 1948.
Listed by Underwriters' Laboratories, Inc.

SINGLE FIBROUS COVERING

Cond. Size AWG or CM	No. and Size of Strands in Inches	Thickness of Insulation in 64ths	Approx. Over-all Diameter in Inches	Approx. Net Wgt. Lbs. per M Ft.	Std. Pkg. 500 Ft. Coil	Approx. Ship Wgt. Std. Pkg. Lbs.
			SOLID CONDUCTORS			
14	1x.0641	3	.184	27	In Carton	14
12	1x.0808	3	.201	37	In Carton	18
10	1x.1019	3	.222	51	Wrapped	25
8	1x.1285	4	.281	83	Wrapped	41
			STRANDED CONDUCTORS			
14	7x.0242	3	.192	29	In Carton	15
12	7x.0305	3	.211	38	In Carton	20
10	7x.0385	3	.237	53	In Carton	27
8	7x.0486	4	.298	87	Wrapped	43

DOUBLE FIBROUS COVERING

			SOLID CONDUCTORS			
14	1x.0641	3	.200	31	Wrapped	16
12	1x.0808	3	.217	40	Wrapped	21
10	1x.1019	3	.238	55	Wrapped	29
8	1x.1285	4	.299	88	Wrapped	45
6*	1x.1620	4	.333	120	Wrapped	62
			STRANDED CONDUCTORS			
14	7x.0242	3	.208	32	Wrapped	17
12	7x.0305	3	.227	42	Wrapped	22
10	7x.0385	3	.255	57	Wrapped	30
8	7x0486	4	.316	92	Wrapped	47
6	7x.0612	4	.354	131	Wrapped	67
4	7x.0772	4	.407	188	Wrapped	95
					Std. Pkg. 1000 Ft.	
3	7x.0867	4	.435	227	On 30" Reel	286
2	7x.0974	4	.493	276	On 30" Reel	334
1	19x.0664	5	.563	357	On 30" Reel	420
1/0	19x.0745	5	.603	431	On 30" Reel	499
2/0	19x.0837	5	.649	526	On 30" Reel	596
3/0	19x.0940	5	.701	644	On 30" Reel	719
4/0	19x.1055	5	.759	793	On 36" Reel	919
250,000	37x.0822	6	.838	960	On 42" Reel	1164
300,000	37x.0900	6	.903	1134	On 42" Reel	1341
350,000	37x.0973	6	.953	1295	On 42" Reel	1502
400,000	37x.1040	6	1.001	1458	On 42" Reel	1675
500,000	37x.1162	6	1.088	1794	On 42" Reel	2017
					Std. Pkg. 500 Ft.	
600,000	61x.0992	7	1.196	2156	On 48" Reel	2464
700,000	61x.1071	7	1.269	2442	On 48" Reel	2799
750,000	61x.1109	7	1.304	2621	On 48" Reel	2960
800,000	61x.1145	7	1.334	2823	On 54" Reel	3203
900,000	61x.1215	7	1.339	3137	On 54" Reel	3549
1,000,000	61x.1280	7	1.456	3467	On 54" Reel	3822

*Not permitted by National Electrical Code for installation in raceways.

NATIONAL ELECTRIC WIRES
NATIONAL "DILEC" SAFECOTE DUPLEX BUILDING WIRE
Type RD—600-Volt



Duplex building wire is composed of two fibrous covered wires laid parallel and encased in a tight fitting overall cotton braid, also with Safecote finish.

Size A.W.G.	Thickness Insulation Inches	Approx. O.D. Inches	Std. Pkg. Feet (Coil)	Approx. Shpg. Wt. Lbs. Std. Pkg.
		Solid		
14	2/64	.20x.34	500	29
12	2/64	.22x.39	500	38
10	3/64	.26x.49	500	.62
8	4/64	.32x.60	250	50
6	4/64	.36x.68	250	68
		Stranded		
14	2/64	.21x.37	500	30
12	2/64	.23x.41	500	40
10	3/64	.27x.52	500	65
8	4/64	.33x.64	250	51
6	4/64	.38x.72	250	70

FIXTURE WIRE
Types RF and RHF



In size 18 Underwriters' Laboratories approve both 1/64- and 1/32-inch insulation but in size 16 only 1/32-inch innsulation is approved.

National Electric "Dilec" fibrous covering is supplied in this type of Fixture Wire, resulting in wire with smaller overall diameter and a smoother finish. In the crowded spaces where Fixture Wire is used the smaller diameter "Dilec" Wire is considerably easier to install than the conventional braided type.

National Electric Fixture Wire of the RF Type has the "Dilec" fibrous covering treated with Safecote saturation and finish embodying the flame-retardant, moisture-resistant, and slick finish feature. In addition, the various bright, fast Safecote colors provide durable color-coding.

TYPE RF AND TYPE RHF FIXTURE WIRE
600 Volt Service—Code and Heat Resistance Grades
Listed by Underwriters' Laboratories, Inc.

SINGLE FIBROUS COVERING

Conductor Size AWG	No. & Size of Strands	Thickness of Ins. in 64ths	App. Overall Diameter	App. Net wt. lbs. per M ft.	Std. Pkg.	Appr. Shp. Wgt. Std. Pkg. lbs.
Type FR 60° C (140° F)						
			Solid Conductors			
18‡	1x.0403"	1	.10"	9	1000' Spool	11
18	1x.0403"	2	.13"	12	1000' Spool	14
16	1x.0508"	2	.14"	16	1000' Spool	18
			Stranded Conductors			
18‡	7x.0152"	1	.11"	9	1000' Spool	11
18	7x.0152"	2	.13"	12	1000' Spool	14
16	7x.0192"	2	.14"	16	1000' Spool	18
Type RHF 75° C (167° F)						
			Solid Conductors			
18‡	1x.0403"	1	.11"	9	1000' Spool	11
18	1x.0403"	2	.13"	12	1000' Spool	14
16	1x.0508"	2	.14"	16	1000' Spool	18
			Stranded Conductors			
18‡	7x.0152"	1	.11"	9	1000' Spool	11
18	7x.0152"	2	.13"	12	1000' Spool	14
16	7x.0192"	2	.14"	16	1000' Spool	18

‡ For 300 volt service.

NATIONAL ELECTRIC NON-METALLIC SHEATHED CABLE

FROSTY-FINISH CANVAS-BACK LOOMWIRE

For Dry Locations—Normal Requirements
New Smaller Over-all Diameter



Listed by Underwriters' Laboratories, Inc.

The new National Electric Frosty Finish Canvas-Back Loomwire is easily stripped. A paper dam under the sheath, surrounding the conductor assembly, adheres to the sheath when stripped and doesn't let the paper saturant penetrate to the paper wrap. This assures clean conductor assembly and clear markings. There is no hot-weather tackiness. Frosty Finish pulls from the carton freely in temperatures as high as 125° F—does not stick to your hands. This loomwire is ideally suited for all types of wiring conditions in homes and farm buildings as recommended in the National Electrical Code. Maximum moisture resistance.

With Type TW Conductors

WITHOUT GROUND WIRE

Size of Cable	Approximate Feet Per Coil	Approx. Shpg. Wgt.
14/2	250	62
12/2	250	77
10/2	250	102
8/2	125	186
6/2	125	283
4/2	125	400
14/3	250	96
12/3	250	122
10/3	250	170
8/3	125	288
6/3	125	460
4/3	125	672

WITH GROUND WIRE

14/2	250	77
12/2	250	98
10/2	250	123
8/2*	125	226
6/2*	125	336
4/2*	125	412
14/3	250	104
12/3	250	132
10/3	250	192
8/3	125	336
6/3	125	496
4/3	125	650

*Unless order specifies "With Heavy Grounding Wire," cable with standard size of grounding wire will be shipped, i.e.—No. 8 cable with No. 12 grounding wire, No. 6 cable with No. 10 grounding wire and No. 4 cable with No. 8 grounding wire

Orders specifying "With Heavy Grounding Wire" will be furnished with No. 10 grounding wire in No. 8 cable, No. 8 grounding wire in No. 6 cable and No. 6 grounding wire in No. 4 cable at the same price as cable with standard size of grounding wire.

NE-O-PRENE LOOMWIRE



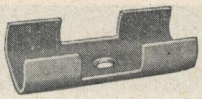
Non-metallic Sheathed Cable with Neo-prene insulation and tough durable Ne-o-prene jacket. For wet locations and severe usage.

Listed by Underwriters' Laboratories, Inc.

Size of Cable	Approx. Feet Per Coil	Shpg. Wt. Per 1000 Ft.	Size of Cable	Approx. Feet Per Coil	Shpg. Wt. Per 1000 Ft.
14/2	250	92	14/3	250	135
12/2	250	113	12/3	250	171
10/2	250	146	10/3	250	224

NATIONAL ELECTRIC NON-METALLIC SHEATHED CABLE

FITTINGS FOR LOOMWIRE



No. 9000 clip for open wiring — 14/2 and 12/2 cable.

Cat. No.	Unit Pkg.	Std. Pkg.	Wt.Lbs. Std.Pkg.
9000	50	500	10½



No. 9011 strap for concealed wiring—14/2 and 12/2 cable.

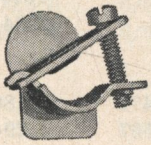
Cat. No.	Unit Pkg.	Std. Pkg.	Wt.Lbs. Std.Pkg.
9011	50	1000	7



No. 9012 strap for concealed wiring—14/3 and 12/3 cable.

Cat. No.	Unit Pkg.	Std. Pkg.	Wt.Lbs. Std.Pkg.
9012	50	1000	7¾

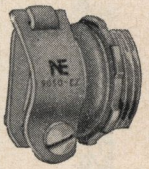
LOOMWIRE CONNECTORS
ROCK-IN TYPE



For 14/2, 14/3, 12/2 and 12/3 Loomwire.

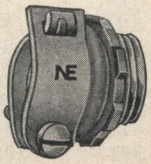
Cat. No.	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 1000
9049-EZ	50	1000	44

LOOMWIRE CONNECTORS



For 14/2, 14/3, 12/2, 12/3 Loomwire. .584 inch open .343 inch closed.

Cat. No.	Unit Pkg.	Std. Pkg.	Wt. Lbs Per 1000
9050-EZ	50	1000	68



For 10/2, 10/3 Loomwire. .670 inch open .500 inch closed.

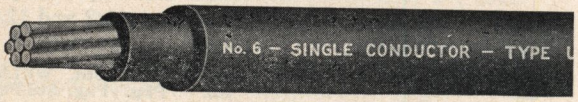
Cat. No.	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 1000
9051-EZ	50	1000	68

All Fittings Listed by Underwriters' Laboratories, Inc.

NATIONAL ELECTRIC CABLES

NON-METALLIC FLEXLAY CABLES (FOR UNDERGROUND USE)

TYPE RR



SINGLE CONDUCTOR

0 to 600 Volt

SINGLE CONDUCTOR SOLID

AWG Size	Thickness—64ths Insulation	Thickness—64ths Sheath	Approx. O.D. (Inches)	Approx. Net Wt. Lbs. Per 1000 Ft.
*14	3	3	.255	42
12	3	3	.272	54
10	3	3	.293	68
8	4	3	.354	103

SINGLE CONDUCTOR STRANDED

8	4	3	.374	109
6	4	3	.412	148
4	4	3	.461	206
2	4	3	.523	297
1	5	4	.648	406
1/0	5	4	.688	484
2/0	5	4	.735	583
3/0	5	4	.785	704
4/0	5	4	.848	859
250MCM	6	5	.954	1059
300MCM	6	5	1.009	1229
350MCM	6	5	1.060	1395
500MCM	6	5	1.193	1910
750MCM	7	5	1.433	2834

Solid		2001 to 3000 Volts		
8	7/64	3/64	.471	180
6	8/64	4/64	.567	294
Stranded				
6	8/64	4/64	.589	307
4	8/64	4/64	.637	361
2	8/64	4/64	.697	498
1	8/64	4/64	.737	579
1/0	8/64	4/64	.778	675
2/0	8/64	4/64	.824	793
3/0	8/64	5/64	.906	1019
4/0	8/64	5/64	.964	1208

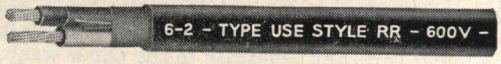
Solid		4001 to 5000 Volts		
8	10/64	4/64	.595	290
6	10/64	4/64	.630	324
Stranded				
6	10/64	4/64	.651	341
4	10/64	4/64	.700	420
2	10/64	4/64	.760	560
1	10/64	4/64	.800	637
1/0	10/64	5/64	.871	806
2/0	10/64	5/64	.917	940
3/0	10/64	5/64	.969	1067
4/0	10/64	5/64	1.027	1288

NATIONAL ELECTRIC CABLES

NON-METALLIC FLEXLAY CABLES (FOR UNDERGROUND USE)

TYPE RR

Listed by Underwriters' Laboratories, Inc.



TWO CONDUCTOR

0 to 600 Volt

TYPE USE

TWO CONDUCTOR—SOLID FLAT

Size AWG or MCM	Thickness in Inches—Rubber Insulation	Thickness in Inches—Rubber Jacket	Nominal Overall Diameter, Inches	Approx. Net Wt. Lbs. Per 1000 Ft.
14*	3	3	.280x.466	88
12	3	3	.297x.500	118
10	3	4	.349x.573	156
8	4	4	.415x.705	235

TWO CONDUCTOR—STRANDED FLAT

6	4	4	.498x.846	340

		2001 to 3000 Volts		
Solid				
8*	7/64	5/64	.910	401
6*	8/64	5/64	1.041	552
Stranded				
6*	8/64	5/64	1.083	586
4	8/64	6/64	1.212	823
2	8/64	6/64	1.332	1129
1	8/64	6/64	1.412	1304
1/0	8/64	6/64	1.495	1528
2/0	8/64	6/64	1.596	1809
3/0	8/64	7/64	1.721	2167
4/0	8/64	7/64	1.836	2614

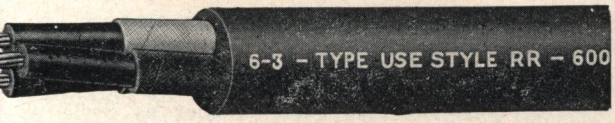
		4001 to 5000 Volts		
Solid				
8*	10/64	5/64	1.098	527
6	10/64	5/64	1.166	706
Stranded				
6	10/64	6/64	1.240	788
4	10/64	6/64	1.338	966
2	10/64	6/64	1.458	1272
1	10/64	6/64	1.538	1442
1/0	10/64	6/64	1.621	1665
2/0	10/64	7/64	1.744	1997
3/0	10/64	7/64	1.847	2355
4/0	10/64	7/64	1.962	2796

*Furnished in Flat Twin Construction. All other sizes in Round Construction.

NATIONAL ELECTRIC CABLES

NON-METALLIC FLEXLAY CABLES
(FOR UNDERGROUND USE)

TYPE RR



THREE CONDUCTOR

0 to 600 Volt

TYPE USE

Size AWG or MCM	Thickness in Inches — Rubber Insulation	Rubber Jacket	Nominal Overall Diameter, Inches	Approx Net Wt. Lbs. Per 1000 Ft.
THREE CONDUCTOR—SOLID				
14*	3	4	.550	156
12	3	4	.587	188
10	3	4	.632	254
8	4	4	.774	355
THREE CONDUCTOR—STRANDED				
6	4	5	.929	548
4	4	5	1.024	746
2	4	5	1.155	1056
1	5	6	1.340	1362
1/0	5	6	1.426	1615
2/0	5	6	1.527	1945
3/0	5	6	1.635	2364
4/0	5	7	1.792	2859

*For use between buildings only.

2001 to 3000 Volts

Solid				
8	7/64	5/64	.968	656
6	8/64	5/64	1.107	877
Stranded				
6	8/64	5/64	1.139	910
4	8/64	6/64	1.293	1238
2	8/64	6/64	1.425	1658
1	8/64	6/64	1.508	1869
1/0	8/64	6/64	1.593	2189
2/0	8/64	7/64	1.723	2646
3/0	8/64	7/64	1.834	3166
4/0	8/64	7/64	1.968	3768

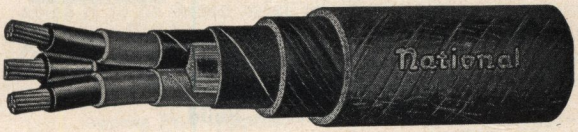
4001 to 5000 Volts

Solid				
8	10/64	6/64	1.198	868
6	10/64	6/64	1.271	1045
Stranded				
6	10/64	6/64	1.324	1108
4	10/64	6/64	1.427	1424
2	10/64	6/64	1.560	1849
1	10/64	6/64	1.638	2072
1/0	10/64	7/64	1.759	2500
2/0	10/64	7/64	1.858	2930
3/0	10/64	7/64	1.968	3432
4/0	10/64	7/64	2.099	4034

NATIONAL ELECTRIC CABLES

FULL-METALLIC FLEXLAY CABLE
(FOR UNDERGROUND USE)

TYPE RLJFJ



THREE CONDUCTOR

0 to 600 Volt

or C.M. ze A.W.G.	Thickness of Rubber Inches	Thickness of Lead Sheath Inches	Approx. O.D. Inches	Wt. Lbs. Per M Ft.
*14	3/64	4/64	.934	1015
*12	3/64	4/64	.971	1112
*10	3/64	4/64	1.014	1226
* 8	4/64	4/64	1.138	1542
* 6	4/64	5/64	1.243	2015
6	4/64	5/64	1.290	2127
4	4/64	5/64	1.463	2300
2	4/64	5/64	1.582	3370
1	5/64	6/64	1.767	4290
1/0	5/64	6/64	1.855	4760
2/0	5/64	6/64	1.952	5300
3/0	5/64	6/64	2.063	5980
4/0	5/64	7/64	2.219	7200
250,000	6/64	7/64	2.389	8150
300,000	6/64	7/64	2.507	9020
350,000	6/64	7/64	2.617	9860
400,000	6/64	8/64	2.749	11250
450,000	6/64	8/64	2.844	12070

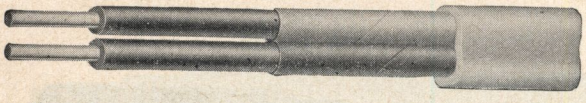
2001 to 3000 Volt

*14	7/64	5/64	1.234	1838
*12	7/64	5/64	1.271	1925
*10	7/64	5/64	1.316	2082
* 8	7/64	5/64	1.372	2273
* 6	8/64	5/64	1.571	2991
6	8/64	5/64	1.619	3171
4	8/64	6/64	1.754	3950
2	8/64	6/64	1.883	4490
1	8/64	6/64	1.969	4990
1/0	8/64	6/64	2.057	5470
2/0	8/64	7/64	2.181	6470
3/0	8/64	7/64	2.297	7190
4/0	8/64	7/64	2.421	8020
250,000	9/64	7/64	2.589	8990
300,000	9/64	8/64	2.738	10460
350,000	9/64	8/64	2.848	11390
400,000	9/64	8/64	2.949	12240
450,000	9/64	8/64	3.043	13070

*Solid conductors. All sizes not marked with asterisk are Stranded.

NATIONAL ELECTRIC BUILDING CABLE

"DILEC" SAFECOTE RUBBER INSULATED LEAD COVERED BUILDING-TYPE CABLE TYPES RDL AND RHDL—600 VOLTS



Duplex cable has two wires laid parallel and encased in an overall lead sheath. Wire construction and finish is the same as single-conductor.

Twin-Conductor—Solid

Size A.W.G.	Thickness Inches Rubber	Lead	Approx. O.D. Inches	Std. Pkg. Feet (Reel)	Approx. Shpg. Wt. Lbs. Per M Ft.
*‡18	2/64	2/64	.19x .33	1000	145
*‡16	2/64	2/64	.20x .35	1000	165
14	2/64	2/64†	.22x .38	**1000	181
12	2/64	2/64†	.24x .41	**1000	211
10	3/64	3/64†	.32x .55	**1000	403
8	4/64	3/64†	.38x .66	1000	532
		Twin-Conductor—Stranded			
14	2/64	2/64†	.23x .39	**1000	188
12	2/64	2/64††	.25x .43	**1000	221
10	3/64	3/64†	.32x .55	**1000	425
8	4/64	3/64†	.38x .66	1000	563
6	4/64	4/64	.47x .81	1000	848
4	4/64	4/64†	.52x .91	1000	1066
2	4/64	4/64†	.58x1.03	1000	1310
1	5/64	5/64	.67x1.19	1000	1860
1/0	5/64	5/64†	.72x1.27	1000	2120
2/0	5/64	5/64†	.76x1.36	1000	2395
3/0	5/64	5/64†	.81x1.47	1000	2730
4/0	5/64	5/64†	.87x1.58	1000	3120

TYPES RML AND RHML—600 VOLTS

Three Conductor—Solid



*‡18	2/64—3/64	.41	1000	315
*‡16	2/64—3/64	.44	1000	345
14	2/64—3/64†	.44	1000	370
12	2/64—3/64†	.49	1000	428
10	3/64—4/64	.64	1000	743
8	4/64—4/64	.77	1000	978
	Three-Conductor—Stranded			
14	2/64—3/64†	.47	1000	389
12	2/64—3/64†	.51	1000	449
10	3/64—4/64	.64	1000	780
8	4/64—4/64	.77	1000	1030
6	4/64—5/64	.92	1000	1456
4	4/64—5/64	1.03	1000	1806
2	4/64—5/64	1.16	1000	2240
1	5/64—6/64	1.33	1000	2980
1/0	5/64—6/64	1.42	1000	3340
2/0	5/64—6/64	1.52	1000	3830
3/0	5/64—6/64	1.63	1000	4370
4/0	5/64—7/64	1.79	1000	5430
250000	6/64—7/64	1.96	500	6320
300000	6/64—7/64	2.08	500	7100
350000	6/64—7/64	2.19	500	7830
400000	6/64—8/64	2.32	500	9130
500000	6/64—8/64	2.50	500	10550

*Not listed by Underwriters' Laboratories.
‡For 300 volt service.
†I.P.C.E.A. and A.S.T.M. Specifications require 1/64-inch heavier lead sheath.
**Standard Package of two-conductor No. 14, 12, 10, is 1000 ft. lengths on standard reels or 500 ft. lengths on non-returnable reels.
††I.P.C.E.A. and A.S.T.M. Specifications require 2/64-inch heavier lead sheath.

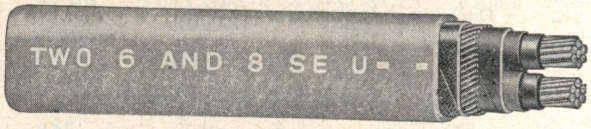
NATIONAL ELECTRIC CABLES

SERVICE-ENTRANCE CABLE

Type "SE"—Style "U"

Approved for Circuits not Over 208 Volts to Ground

Type SE, Style U Service-Entrance Cable is substantially identical in construction with Style A Cable, except that the steel strip over the neutral conductor is omitted. Style U Cable is approved for installation in the same manner as Style A Cable and, by reason of its lighter weight, is suitable for installation in a continuous length from the pole to the service equipment as a combination Service Drop and Service Entrance Cable. The 1953 National Electrical Code permits the use of this cable as well as Style A Cable in interior wiring systems for range and domestic water-heater circuits provided the voltage to ground is not over 150 volts.



Conductors—Amaloy coated copper conductors—No. 12 and No. 10 solid, No. 8 and larger stranded. Insulation—Performance grade rubber insulation—N.E.C. thickness for 600 volts.

Conductor Covering — Moisture-resistant and flame-retardant Safecote finished "Dilec" fibrous covering with complete identification in Safecote marking. Conductors black and red in three-conductor assemblies.

Concentric Conductor — The insulated conductor assembly is covered with a layer of black Kraft paper tape over which is applied the concentric uninsulated conductor in the form of small, tinned, copper wires.

Safecote Marking—On the exterior of the cable is the continuous Safecote marking which provides at 2-foot intervals the number and size of conductors, the type designation, and a measuring marker.

No. of Cond's. (Total)	Ins. Cond's. (No. and Size)	Unins. Neutral Conc. Cond.	†Nominal Over-all Diam. Inches	Std. Pkg. Feet (Coil)	Approx. Shpg. Wt. Lbs. Per M Ft.
2	1—12	12	.36	250	90
3	2—12	12	.39x .52	250	150
2	1—10	10	.38	250	110
3	2—10	10	.43x .58	250	210
2	1— 8	8	.47	250	200
3	2— 8	8	.51x .74	250	300
2	1— 6	8	.51	250	240
2	1— 6	6	.53	250	270
3	2— 6	8	.55x .82	200	380
3	2— 6	6	.56x .84	150	420
2	1— 4	6	.58	200	350
2	1— 4	4	.60	200	400
3	2— 4	6	.61x .93	150	550
3	2— 4	4	.62x .94	150	610
2	1— 2	4	.66	150	520
2	1— 2	2	.68	150	590
3	2— 2	4	.68x1.06	100	800
3	2— 2	2	.70x1.08	100	900

All diameters listed conform with N.E.M.A. and I.P.C.E.A. Standards and are subject to a tolerance of plus or minus .030". Standard Service Cable fittings are designed for use with National Service Cables.

Lengths of 500 feet or more can be supplied on reels, on special order.

A.C.T. ARMORED CABLE



Listed by Underwriters' Laboratories, Inc.

Type ACT is the recently approved Armored Cable constructed with thermoplastic Type T conductors.

Provides the following desirable features: small diameter cable, time saving, easy stripping conductors, clean, permanently color coded conductors, and binding strip on all sizes.

Solid Wires			Stranded Wires		
Size of Cable	Approx. Feet Per Coil	Bush. Per Coil	Size of Cable	Approx. Feet Per Coil	Bush. Per Coil
Duplex Conductors					
14/2	250	35	8/2S	150	20
12/2	250	35	6/2S	100	16
10/2	250	35	4/2S	100	16
8/2	150	20	2/2S	100	16
Triplex Conductors					
14/3	250	35	8/3S	150	20
12/3	250	35	6/3S	100	16
10/3	250	35	4/3S	100	16
8/3	150	20	2/3S	100	16
Four-Conductors					
14/4	250	35	8/4S	100	16
12/4	250	35	6/4S	100	16
10/4	150	20	4/4S	100	16

A.C.L. ARMORED LEADED CABLE

Duplex Conductors

Solid Wires			Stranded Wires		
Size of Cable	Approx. Feet Per Coil	Bush. Per Coil	Size of Cable	Approx. Feet Per Coil	Bush. Per Coil
14/2	150	..	8/2S	100	..
12/2	150	..	6/2S	100	..
10/2	100	..	....	...	..
Triplex Conductors					
14/3	150	..	8/3S	100	..
12/3	150	..	6/3S	100	..
10/3	100	..	4/3S	100	..

RED FIBRE ANTI-SHORT BUSHINGS

For use with A.B.C. Armored Bushed Cable. Each coil of A.B.C. cable has attached a bag containing sufficient "Anti-Short" Bushings for average requirements. Extra "Anti-Shorts" are sold separately.

NATIONAL ELECTRIC FLEXSTEEL

LIGHT-WALL FLEXIBLE-STEEL CONDUIT



Conduit is of Bondhook construction, which enables it to be fished most readily — the convolutions act as roller-bearings with less than one-half the friction surface.

Listed by Underwriters' Laboratories, Inc.

Size, Inches	Approx. Ft. per Std. Coil	Approx. Lbs. per 1000 Ft.	Size, Inches	Approx. Ft. per Std. Coil	Approx. Lbs. per 1000 Ft.
5/16	250	150	1¼	50	1250
⅜	250	255	1½	25	1625
½	100	470	2	25	2125
¾	50	575	2½	25	2630
1	50	1020	3	25	3130

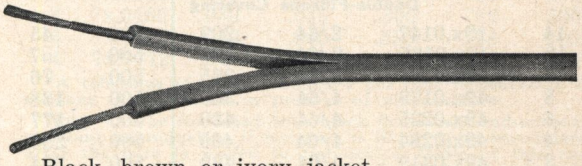
NATIONAL ELECTRIC BARE ARMORED GROUND-WIRE



Size	Approx. Ft. per Coil	Approx. Lbs. per 1000 Ft.
8/1 Solid	250	136
6/1 Solid	250	168
4/1 Solid	250	241

NATIONAL ELECTRIC FLEXIBLE CORDS

TYPE POT—"OVALCORD"—300-VOLT



Black, brown or ivory jacket.

Size and Type	Size Strands	Nominal Overall Diam.	Std. Pkg. Feet (Spool)	Approx. Shpg. Wt. Lbs. Std Pkg.
18 POT-64	41x34	.245x.125	4-250	27
16 POT-32	65x34	.335x.165	4-250	45

NATIONAL ELECTRIC TELEPHONE WIRE

FOR INSIDE USE—Glazed Cotton Braid



Size	Diam. Over	Stand. Coil	2-Conductor Overall Diam.	2-Conductor Shpg. Wt.Lbs.	3-Conductor Overall Diam.	3-Conductor Shpg. Wt.Lbs.
22	.056	500	.172	5	.185	8
19	.094	500	.248	11	.267	17

FOR OUTSIDE USE—Safecote



Size	Diam. Over	Stand. Coil	2-Conductor Overall Diam.	2-Conductor Shpg. Wt.Lbs.	3-Conductor Overall Diam.	3-Conductor Shpg. Wt.Lbs.
19	.094	500	.260	11	.280	17
18	.109	500	.294	16	.316	24
16	.125	500	.326	21	.350	32
14	.156	1000	.400	60	...	..

NATIONAL FIBROUS-COVERED WIRE

FLEXIBLE AND EXTRA FLEXIBLE RUBBER INSULATED

600-VOLT—CODE



This type of wire is particularly adaptable to switchboard, brush-holder, motor lead, power and control wiring in trolley cars, and similar uses where a more flexible than standard rubber covered wire or cable is desirable. The rubber insulation is protected by a fibrous covering saturated and finished with Safecote compounds to produce a moisture-resisting and flame-retarding wire or cable.

Special stranding, with or without paper or cotton separator, and higher grades of rubber insulating compound can be furnished on special order.

Flexible

Size A.W.G	No. and Size of Strands	Thickness Insulation Inches	Nominal Overall Diam.	Std.Pkg. Feet (Coil)	Approx. Shpg. Wt. Lbs. Per M Ft.
		Single-Fibrous Covering			
14	19x.0147	2/64	.174	500	37
12	19x.0185	2/64	.194	500	50
10	37x.0169	3/64	.250	500	68
8	49x.0179	4/64	.330	500	121
		Double-Fibrous Covering			
14	19x.0147	2/64	.209	500	45
12	19x.0185	2/64	.229	500	57
10	37x.0169	3/64	.285	500	76
8	49x.0179	4/64	.365	500	138
6	49x.0225	4/64	.430	500	177
4	49x.0284	4/64	.460	500	250
3	49x.0319	4/64	.490	500	304
				(Reel)	
2	49x.0368	4/64	.530	1000	367
1	133x.0253	5/64	.620	1000	468
1/0	133x.0284	5/64	.680	1000	567
2/0	133x.0319	5/64	.720	1000	690
3/0	133x.0358	5/64	.780	1000	845
4/0	133x.0403	5/64	.875	1000	1058

Extra-Flexible

		Single-Fibrous Covering			
				(Coil)	
14	37x.0105	2/64	.174	500	37
12	37x.0134	2/64	.194	500	50
10	49x.0147	3/64	.260	500	68
8	133x.0112	4/64	.330	500	121
		Double-Fibrous Covering			
14	37x.0105	2/64	.209	500	45
12	37x.0134	2/64	.229	500	57
10	49x.0147	3/64	.295	500	76
8	133x.0112	4/64	.365	500	138
6	133x.0142	4/64	.430	500	177
4	133x.0179	4/64	.470	500	250
3	133x.0201	4/64	.505	500	304
				(Reel)	
2	133x.0225	4/64	.540	1000	367
1	259x.0179	5/64	.620	1000	468
1/0	259x.0201	5/64	.680	1000	567
2/0	259x.0225	5/64	.720	1000	690
3/0	259x.0253	5/64	.770	1000	845
4/0	259x.0284	5/64	.875	1000	1058

NATIONAL OIL-RESISTING "INDESTRUCTO" CORDS

WITH NEOPRENE JACKET

Cured In Continuous Lead Molu

Used in oil or grease conditions that would be harmful to a rubber jacket, National Electric Special Oil-Resisting "Indestructo" Cords are not affected. The Neoprene (synthetic rubber) material used in the jacket of this special type of cord is highly resistant to the action of oil derivatives which quickly deteriorate compounds made of natural rubber. The designations for this cord are Type SJO for "medium duty" cord and Type SO for "heavy-duty" cord.

TYPE SJO—300-VOLT

Two-Conductor



Size A.W.G.	No. and Size of Strands	Thickness Insulation Inches	Nom. Overall Diam.	Current Carrying Cap., Amps.	†Std.Pkg. Feet	Approx. Shpg. Wt.Lbs. Std Pkg.
18	41x34	2/64	.300	7	250 S	46
16	65x34	2/64	.325	10	250 S	57

Three-Conductor



18	41x34	2/64	.330	7	250 S	63
16	65x34	2/64	.355	10	250 S	78

TYPE SO—600-VOLT

Two-Conductor



Size A.W.G.	No. and Size of Strands	Thickness Insulation Inches	Nom. Overall Diam.	Current Carrying Cap., Amps.	†Std.Pkg. Feet	Approx. Shpg. Wt.Lbs. Std.Pkg.
18	41x34	2/64	.390	7	250 S	77
16	65x34	2/64	.405	10	250 S	86
14	41x30	3/64	.530	15	250 C	145
12	65x30	3/64	.605	20	250 C	193
10	104x30	3/64	.640	25	250 C	231

Three-Conductor



18	41x34	2/64	.405	7	250 S	90
16	65x34	2/64	.430	10	250 S	107
14	41x30	3/64	.560	15	250 C	179
12	65x30	3/64	.635	20	250 C	234
10	104x30	3/64	.690	25	250 C	298

Four-Conductor



18	41x34	2/64	.445	7	250 S	108
16	65x34	2/64	.485	10	250 S	138
14	41x30	3/64	.605	15	250 C	219
12	65x30	3/64	.665	20	250 C	272
10	104x30	3/64	.745	25	250 C	365

NATIONAL ELECTRIC APPLIANCE LEAD WIRE

300 VOLT—ALL-ASBESTOS



(1) Copper Conductor.
(2) Felted Asbestos (Impregnated).
(a) Type A Smokeless (flame-and-heat).
(b) Type AI moisture-resistant (flame-heat-and-moisture).

Appliance lead wire with smokeless insulation is recommended for wiring electrical appliances such as hot plates and toasters where high temperature and no moisture are encountered. Standard colors—Black, White, Red, Green, Gray, Blue or Yellow.

Appliance lead wire with moisture-resisting insulation is recommended for wiring electric ranges, stoves, hot water heaters and other electrical appliances where both heat and moisture resistance are desirable. The insulation is moisture resisting but may smoke at approximately 300° F. Standard colors — same as above.

NE Table 41—300 Volts Service
NEMA Publication No. 48-131

Conductor Size A.W.G.	Number and Size of Strands	Thickness Felted Asbestos	Nominal Over-all Diameter	Approx. Net Wt. Lbs. Per M Ft.	Std. Pkg. Coils
18	Solid	.030″	.100″	10	1000′
16	Solid	.030″	.111″	13	1000′
14	Solid	.030″	.124″	19	1000′
12	Solid	.030″	.141″	27	1000′
10	Solid	.030″	.162″	41	1000′
8	Solid	.030″	.188″	62	1000′
18	Solid	.040″	.120″	12	1000′
16	Solid	.040″	.131″	15	1000′
14	Solid	.040″	.144″	21	1000′
12	Solid	.040″	.161″	30	1000′
10	Solid	.040″	.182″	43	1000′
8	Solid	.040″	.208″	64	1000′

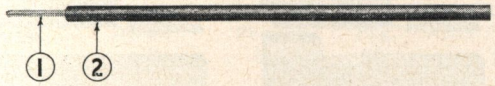
NE Table 43—300 Volt Service
NEMA Publication No. 48-131

18	16/30(.010″)	.030″	.105″	10	1000′
16	26/30(.010″)	.030″	.119″	14	1000′
14	41/30(.010″)	.030″	.135″	20	1000′
12	65/30(.010″)	.030″	.155″	29	1000′
10	104/30(.010″)	.030″	.180″	44	1000′
8	165/30(.010″)	.030″	.211″	66	1003′
18	16/30(.010″)	.040″	.125″	12	1000′
16	26/30(.010″)	.040″	.139″	16	1000′
14	41/30(.010″)	.040″	.155″	22	1000′
12	65/30(.010″)	.040″	.175″	32	1000′
10	104/30(.010″)	.040″	.200″	46	1000′
8	165/30(.010″)	.040″	.231″	68	1000′

Note: The smokeless or moisture-resisting electric stove wires described above are available in a three conductor assembly.

NATIONAL ELECTRIC APPLIANCE GROUNDING WIRE

300 VOLT



(1) Copper Conductor.
(2) Felted Asbestos (Impregnated with flame-heat-and-moisture saturant).

Recommended for grounding metallic part of stove or electric range to ground wire as required in National Electrical Code. Color — Green.

Size AWG	Number and Size of Strands (Untinned)	Felted Asbestos Wall	Nominal Over-all Diameter	Approx. Net Wt. Lbs. Per M Ft.	Std. Pkg. Coil
14	7/.0242	.015″	.103″	16	1000′

NATIONAL ELECTRIC STOVE WIRE

TYPE AA—ALL-ASBESTOS

Listed by Underwriters' Laboratories, Inc.



Solid copper conductor. Felted asbestos. Asbestos braid. (White flame-and-heat resisting impregnation.)

For use in wiring stoves, ranges, hot-plates and other heating appliances. Suitable for operating temperatures as high as 200° C. (392° F.) in definitely dry places.

Solid Conductor—300 Volts
NEMA Publication No. 48-131 NE Table 44

Size AWG	No. and Size of Strands	Thickness Felted Asbestos	Thickness Asbestos Braid	*Nominal Over-all Diameter	Approx. Net Wt Pounds M Feet	Std. Pkg.
18	Solid	.030	.045	.190	23	500C
16	Solid	.030	.045	.205	27	500C
14	Solid	.030	.045	.215	33	500C
12	Solid	.030	.045	.235	42	500C
10	Solid	.030	.045	.255	56	500C
8	Solid	.030	.045	.280	78	500C
6	Solid	.040	.045	.335	119	500R
4	Solid	.040	.045	.375	169	500R

Stranded Conductor—300 Volts
NEMA Publication No. 48-131 NE Table 45

18	7x.0151	.030	.045	.195	24	500C
16	7x.0193	.030	.045	.210	29	500C
14	7x.0242	.030	.045	.225	35	500C
12	7x.0305	.030	.045	.245	44	500C
10	7x.0385	.030	.045	.270	59	500C
8	7x.0486	.030	.045	.300	82	500C
6	7x.0612	.040	.045	.355	128	500R
4	7x.0772	.040	.045	.405	183	500R

*A tolerance of plus or minus 5 per cent is necessary on account of variations in process of manufacture.

Note: Can be furnished with black flame-heat-and-moisture resistant impregnation if moisture is likely to be encountered after the wire is placed in the device. Cable of this construction can be operated up to 125° C. (257° F.) and is not listed by Underwriters' Laboratories.

NATIONAL ELECTRIC FIXTURE WIRE

TYPE AF—HEAT RESISTING—300 VOLTS

Listed by Underwriters' Laboratories, Inc.



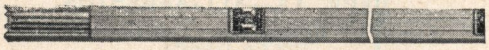
Recommended for wiring lighting fixtures, radio apparatus, and as small motor leads. May be subjected to temperatures up to 150° C. 302° F.). Standard colors, plain type—black or white. Braided type—brown, old brass, or black with or without tracer in cotton or rayon.

Size A.W.G.	No. and Size of Strands	Felted Asbestos Wall	Overall Diameter* Plain (No Braid)	Overall Diameter* Glazed Cotton	Overall Diameter* Rayon	Std. Pkg. Feet (Spool)
18	16x30	.031	.113	.143	.128	500
16	26x30	.031	.127	.157	.142	500
14	41x30	.031	.144	.174	.159	500
12	65x30	.047	.199	.229	.214	500C
10	104x30	.047	.225	.225	.240	500C
18	Solid	.031	.113	.143	.128	500
16	Solid	.031	.127	.157	.142	500
14	Solid	.031	.144	.174	.159	500
12	Solid	.047	.199	.229	.214	500C
10	Solid	.047	.225	.255	.240	500C

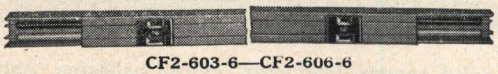
*In accordance with N.E.M.A. Standard and subject to a tolerance of plus or minus 5%.

Multiple conductor Type AFC, AFPO and AFPD assemblies made up with flexible type AF conductors and can be supplied on special order. The color and type of braid covering must be specified.

NATIONAL ELECTRIC "PLUG-IN" STRIP
TYPE CF-2 CONSTANT SERVICE



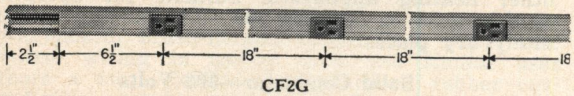
CF2-606-18



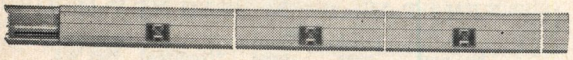
CF2-603-6—CF2-606-6

TYPE CF-3 SWITCH-CONTROLLED





CF2G



CF4

"Plug-in" Strip affords electricians and contractors an excellent opportunity to increase their wiring profits in new home construction, office and store rewiring as well as the modernization market in presently inadequately wired homes.

"Plug-in" Strip is wired with No. 12 AWG wire for 15 ampere, 125 volt or 10 ampere, 250 volt service.

Listed by Underwriters' Laboratories, Inc., the Canadian Standards Association, and complies with the regulations of the National Electrical Code.

TYPE CF2

Constant Service 2-wire Type CF2 is a steel enclosed multi-outlet assembly installed for thousands of residential, commercial and light industrial applications where a spread of convenience outlets was required to provide safe, dependable, convenient electric service.

TYPE CF2-G

Type CF2-G provides a spread of convenient receptacles for the use of grounded equipment.

Existing ungrounded equipment may be converted to the grounded system or its use may be continued ungrounded. The dual-purpose receptacle accommodates either system.

TYPE CF3

Type CF3 three wire "Plug-in" Strip is the most versatile prewired multi-outlet assembly on the market today. It has been designed especially for the home to provide a spread of electrical outlets. CF3 switch controlled "Plug-in" Strip not only has outlets every 18 inches, but each receptacle provides the dual service of either switch-control or constant service.

TYPES CF4 CF4-G

CF4 consists of the CF3 channel with a standard CF2 or CF2-G receptacle mounted in the upper half. This leaves a space in the lower half of the channel for installing up to three No. 12 conductors. A ½" knockout at each end of the strip provides a means of entering or leaving the raceway.

These provisions make possible a normal "Plug-in" strip installation plus capacity for handling any additional single-phase or three phase load within the limits of No. 12 wire size.

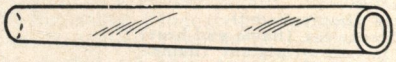
Cat.	Length	Plug-Ins Per Lgth.	Unit Pkg. Lgths.	Std. Pkg. Lgths.	Wt. Lbs. Std. Pkg.
CF2-606-18	6′	4	1	10	26
CF2-603-6	33″	5	1	10	15
CF2-606-6	69″	11	1	10	26
CF2-615	6′	0	1	10	23
CF2G-606-6	69″	11	1	10	26
CF2G-606-18	6′	4	1	10	26
CF3-606-18	6′	4	1	10	35
CF3-615	6′	0	1	10	27
CF4-606-6	69″	11	1	10	35
CF4-606-18	6′	4	1	10	35
CF4-606-6	69″	11	1	10	35
CF4G-606-18	6′	4	1	10	35

NATIONAL ELECTRIC "PLUG-IN" STRIP



NE-600-2

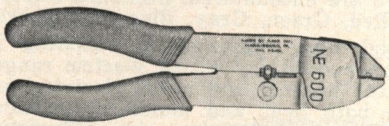
Crimp Connector — Tinned copper Barrel Connector. Furnished with "Plug-In" Strip fittings.



NE-600-1

Insulator Tube — Transparent vinylite tubing. Furnished with all Barrel Connectors.

NE-600 CRIMPING TOOL



NE Connector Tool. The approved tool for crimping a connector barrel to the "Plug - In" Strip conductors.

Has wire cutter and stripper for No. 12 and No. 14 solid wire.

CF-2 "PLUG-IN" STRIP FITTINGS

CF2-607 MOUNTING CLIP



Clips which fasten to the back of "Plug-in" Strip for mounting on top of baseboard. Clips furnished with every length of "Plug-in" Strip.

Cat. No.	Unit Pkg.	Std. Pkg.
CF2-607	50	100

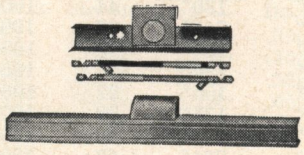
CF2-645 MOUNTING STRAP



For use when mounting "Plug-in" Strip on the surface. Mounting Straps furnished with every length of "Plug-in" Strip.

Cat. No.	Description	Unit Pkg.	Std Pkg.
CF2-645	Mounting Strap	50	100

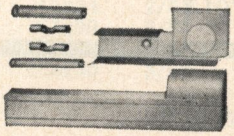
CF2-618 CENTER FEED JUNCTION BOX



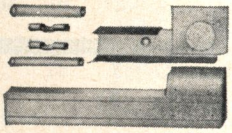
½-inch conduit K.O. in base. Overall length 11 in. Furnished with Barrel Conductors and Insulator Tubes and 2 jumpers for connecting to circuit.

Cat. No.	Unit Pkg.	Std. Pkg.	Wt. Lbs. Std. Pkg.
CF2-618	5	20	8

END FEED JUNCTION BOX



CF2-616-L



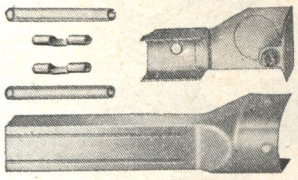
CF2-616-R

For bridging doorways, fireplaces, etc., or used as an end circuit feed. ½-inch conduit knockout in base. Furnished with Crimp Connectors and Insulator Tubes.

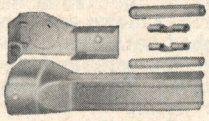
Cat. No.	Length Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Std. Pkg.
CF2-616-L	6⅜	5	20	5
CF2-616-R	6⅜	5	20	5

NATIONAL ELECTRIC "PLUG-IN" STRIP

90 DEGREE AND STRAIGHT END JUNCTION BOX



CF2-617-L

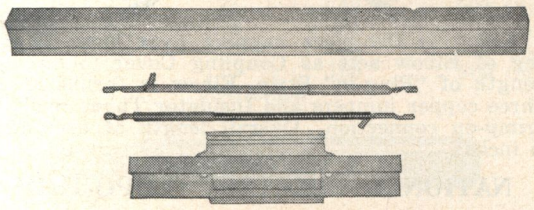


CF2-617-R

For use as surface mounted feed—particularly for commercial installations. ½-inch conduit knockouts on end and rear for connection of any type wiring. Furnished with Crimp Connectors and Insulator Tubes.

Cat. No.	Length Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100
CF2-617-L	6⅜	5	20	25
CF2-617-R	6⅜	5	20	25

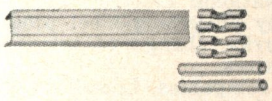
CF2-629 DEVICE AND CONDUIT BOX COVER



For use as cover plate on Device and Outlet Box feed installations. Furnished with two splicing jumpers and Insulator Tubes ready for crimp-on connection. Overall length, 12 inches.

Cat. No.	Unit Pkg.	Std. Pkg.	Wt. Lbs. Std. Pkg.
CF2-629	5	20	15

CF2-644 COUPLING



Covers open ends of adjoining lengths of "Plug-in" Strip. Furnished with Crimp Connectors and Insulator Tubes — for connecting adjoining sections of "Plug-in" Strip.

Cat. No.	Length Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Std. Pkg.
CF2-644	5	5	20	2½

CF2-680 END BLANK AND WIRE NUTS



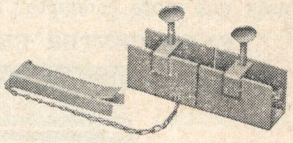
Covers cut-back opening at termination of "Plug-in" Strip runs. Furnished with two wire nuts for insulating conductor ends.

Cat. No.	Length Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Std. Pkg.
CF2-680	2½	5	20	1¼

NATIONAL ELECTRIC "PLUG-IN" STRIP

CF2-623 CUTTING GAUGE

For use in cutting back "Plug-in" Strip and capping to desired measurements. "Cut in the field" principle of installation.



Cat. No.	Unit Pkg.	Std. Pkg.	Wt. Lbs. Std. Pkg.
CF2-623	1	1	1

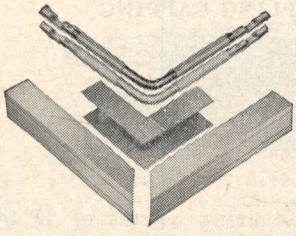
CF2-636 FLAT ELBOW

Two-piece capping elbow — over base. Each capping leg of elbow acts as a coupling cover to adjoining length of "Plug-in" Strip. With crimp connectors and Insulation Tubes.



Cat. No.	Unit Pkg.	Std. Pkg.	Wt. Lbs. Std. Pkg.
CF2-636	5	20	7

CF2-637 EXTERIOR ELBOW

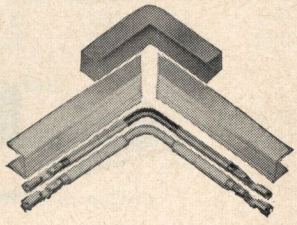


Two-piece capping Elbow — over base. Each capping leg of elbow acts as a coupling cover to adjoining length of "Plug-in" Strip. Furnished with 2 Crimp Connectors and Insulator Tubes. Overall length of elbow legs—5 ins.

Cat. No.	Unit Pkg.	Std. Pkg.	Wt. Lbs. Std. Pkg.
CF2-637	5	20	10

CF2-638 INTERIOR ELBOW

Two-piece capping elbow — over base. Each capping leg of elbow acts as a coupling cover to adjoining length of "Plug-in" Strip. Furnished with Crimp Connectors and Insulator Tubes. Overall length of elbow legs, 5¾ inches.



Cat. No.	Unit Pkg.	Std. Pkg.	Wt. Lbs. Std. Pkg.
CF2-638	5	20	7½

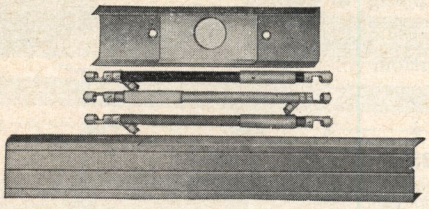
NATIONAL ELECTRIC "PLUG-IN" STRIP

TYPES CF-3—CF-4 "PLUG-IN" STRIP

Features Simplicity of Fittings

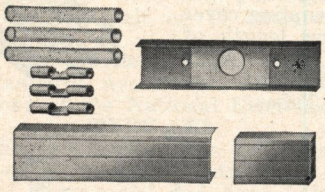
Installation of 3-Wire Switch Control "Plug-in" Strip is exactly the same as two-wire Strip . . . only one more conductor is crimped.

CF3-618 CENTER FEED JUNCTION BOX



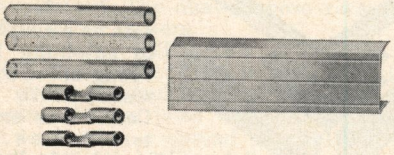
For connecting circuit wires to 3-wire "Plug-in" Strip. Furnish with 3 splicing jumpers and Insulator Tubes ready for crimp-on connection. ½-inch conduit knockout in base. Overall length 11 inches.

CF3-616 END FEED JUNCTION BOX



Reversible End Feed Junction Box accomodates circuit feed-ins on any end of 3-wire "Plug-in" Strip runs. Has ½-inch conduit knockout in base. Furnished with 3 Crimp Connectors and Insulator Tubes for crimp-on connection. Overall length 8½ inches.

CF3-644 COUPLING CAPPING



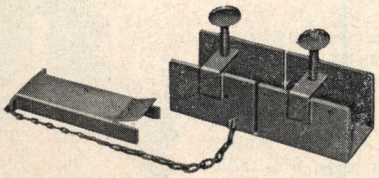
Covers open end of adjoining lengths of "Plug-in" Strip. Furnished with Crimp Connectors and Insulator Tubes. Overall length 5 inches.

CF3-680 END BLANK AND WIRE NUTS



To cover cut-back opening at termination of "Plug-in" Strip runs. Furnished with three Wire Nuts for insulating conductor ends. Overall length 2½ inches.

CF3-623 CUTTING GAUGE



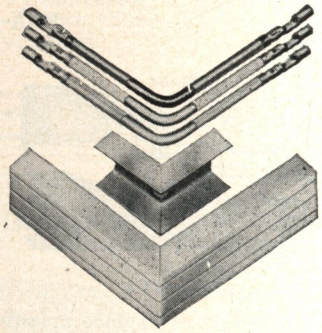
For use in cutting back 3-wire "Plug-in" Strip and capping to desired measurements. See illustrated catalog No. 554 for "cut-in-the-field" principle of installation.

NATIONAL ELECTRIC "PLUG-IN" STRIP

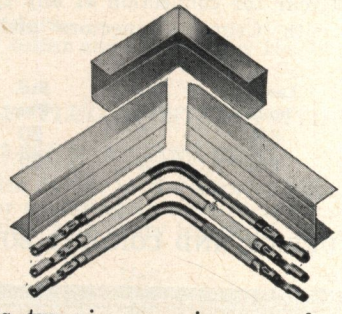
3-WIRE "PLUG-IN" STRIP ELBOWS

CF3-637 EXTERIOR ELBOW

Elbow is one-piece capping over base. Capping leg of Elbow acts as Coupling Cover to adjoining length of "Plug-in" Strip. Elbows are furnished with three copper jumpers and Insulator Tubes ready for crimp-on connection. Overall length of each leg—5 inches.



CF3-638 INTERIOR ELBOW



Elbow is two-piece capping over base. Capping leg of Elbow acts as Coupling Cover to adjoining length of "Plug-in" Strip. Elbow is furnished with three copper jumpers and Insulator Tubes ready for crimp-on connection. Overall length of each leg—5 inches.

NATIONAL ELECTRIC "LOPO-TRIM"



Neutral Satin Gray Finish

Lopo-Trim is a hollow steel quarter round raceway used to carry low potentional wires such as telephone, inter-communication and buzzer on top of the baseboard.

Lopo-Trim has a neutral satin gray finish, matching "Plug-in" Strip, and harmonizes with all tones used in interior decoration. It can be quickly repainted to match baseboard, floor or walls.

Lopo-Trim fits neatly on top of the standard baseboard or on top of National Electric "Plug-in" Strip and held in place by projecting steel prongs. It is easily lifted to provide change of telephone placement or addition of wires.

Approved by telephone companies, Lopo-Trim can now be versatilely installed —

As a baseboard trim,

As a toe-plate where wall or baseboard meet,

As a low potential wiring raceway or chair-rail moulding.

As a quarter round trim above or beneath (or both) installations of National Electric "Plug-in" Strip.

Low potential wiring can be brought out of Lopo-Trim anywhere. Merely drill a hole through the rounded surface—insert a standard grommet and bring wires out. The 6-foot sections of Lopo-Trim match perfectly for continuous installation. Sections are cut to fit and corners mitered identically like wood quarter round.

Cat. No.	Lengths Feet	Standard Package	Wt. Lbs. Std. Pkg.
LT-606	6	17 6-ft. Lengths	20

PARANITE POWER AND LIGHTING WIRES

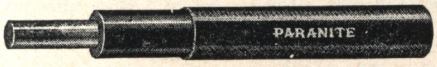
HYDRO-THERM® TYPE RW-RH—600 VOLTS

60° C Wet Locations—75° C Dry Locations

Insulated heat- and moisture-resistant insulation. Paranite wires offer economy and long life where conventional constructions are desired. These wires are finished with a single- or double-fibrous flame-proofed and moisture-proofed covering. Hydro-Therm heat- and moisture-resistant wires are available in solid construction in sizes 14 through 8 (size 6 available with double-fibrous braid) and in stranded constructions in sizes 14 through 8 (single braid) and in sizes 14 through 1,000,000 CM (double braid). Also available in two-conductor braided construction.

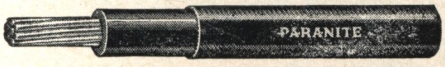
Listed and labeled by Underwriters' Laboratories, Inc.

Solid



Size AWG	Nom. Insul. Thick. 64ths	Nom. O.D. In.	Approx. Net Wt. Lbs./M'	Standard Package
	Single Fibrous Covering			
14	3	.18	28	500' Ctn.
12	3	.20	37	500' Ctn.
10	3	.22	52	500' Coil
8	4	.29	81	500' Coil
	Double Fibrous Covering			
14	3	.20	31	500' Ctn.
12	3	.21	40	500' Ctn.
10	3	.24	51	500' Coil
8	4	.31	83	500' Coil
6	4	.35	125	500' Coil

Stranded



Size AWG or CM	Stranding	Nom. Insul. Thick. 64ths	Nom. O.D. In.	Approx. Net Wt. Lbs./M'	Standard Package
		Single Fibrous Covering			
14	7	3	.19	30	500' Ctn.
12	7	3	.21	40	500' Ctn.
10	7	3	.24	53	500' Coil
8	7	4	.31	86	500' Coil
		Double Fibrous Covering			
14	7	3	.21	33	500' Ctn.
12	7	3	.23	43	500' Ctn.
10	7	3	.26	56	500' Coil
8	7	4	.33	88	500' Coil
6	7	4	.37	134	500' Coil
4	7	4	.42	180	500' Coil
2	7	4	.48	270	500' Coil
1	19	5	.55	354	1000' Reel
1/0	19	5	.59	438	1000' Reel
2/0	19	5	.64	563	1000' Reel
3/0	19	5	.69	688	1000' Reel
4/0	19	5	.75	813	1000' Reel
250,000	37	6	.86	938	1000' Reel
300,000	37	6	.93	1125	1000' Reel
350,000	37	6	.98	1250	1000' Reel
400,000	37	6	1.03	1438	1000' Reel
500,000	37	6	1.11	1750	1000' Reel
600,000	61	7	1.23	2063	500' Reel
700,000	61	7	1.30	2367	500' Reel
750,000	61	7	1.33	2563	500' Reel
800,000	61	7	1.36	2904	500' Reel
900,000	61	7	1.43	3244	500' Reel
1,000,000	61	7	1.48	3575	500' Reel

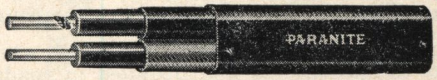
PARANITE POWER AND LIGHTING WIRES

HYDRO-THERM® TYPE RWD-RHD—600 VOLTS

60° C Wet Locations—75° C Dry Locations

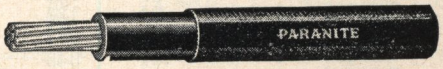
Solid or 7-strand, coated, annealed copper conductors are insulated with heat- and moisture-resistant compound and protected with color-coded waxed fibrous covering. Two conductors are laid parallel, and a waxed fibrous covering completes the assembly.

Listed and labeled by Underwriters' Laboratories, Inc.



Size AWG	Nom. Insul. Thick. 64ths	Nom. O.D. In.	Approx. Net Wt. Lbs./M'	Standard Package
	Solid			
14	3	.22 x .40	67	500' Coil
12	3	.23 x .43	84	500' Coil
10	3	.27 x .47	114	500' Coil
8	4	.32 x .60	174	500' Coil
	Stranded			
14	3	.22 x .42	69	500' Coil
12	3	.24 x .45	92	500' Coil
10	3	.28 x .52	124	500' Coil
8	4	.33 x .64	186	500' Coil
6	4	.38 x .72	263	500' Coil

TYPE RF FIXTURE WIRE—600 VOLTS



1 2 3

1. Tinned copper conductor. 2. Rubber insulation. 3. Cotton braid saturated with moisture-resisting, flame-retarding compound, smoothly finished in black, white, red, green, blue and yellow colors for identification. Stranded conductors increase the flexibility of the wire. The lubricated surface finish of the wire permits easy pulling through conduits and other raceways.

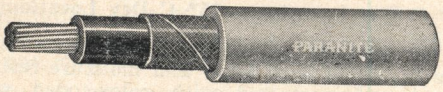
Size A.W.G.	Ampere Carrying Capacity	No. and Dia. of Strands	Rubber Wall 64ths	Approx. Outside Dia.	Approx. Net Wt. M Feet	Std. Lgth. Feet Spls.
		Solid				
*18	3	1x40.30	1	.101	9.5	1000'
18	3	1x40.30	2	.133	13	500'
16	6	1x50.82	2	.144	18	500'
		Stranded				
*18	3	7x15.3	1	.107	10	1000'
18	3	7x15.3	2	.139	16	500'
16	6	7x19.2	2	.151	19	500'

Standard package, 6 spools in carton.

*For 300 volt service.

PARANITE LEAD-COVERED WIRE AND CABLE

TYPE RL—600 VOLTS



1 2 3 4

1. Tinned copper conductors. 2. Rubber insulation. 3. Tape or braid. 4. Lead sheath. Made in single, two or three conductors, solid or stranded, soft-tinned copper, each insulated with Code, Type R; heat-resisting, Type RH; or special rubber compound.

Paranite lead-covered cables are used wherever moisture is encountered and installed in conduit or other raceway or otherwise protected from mechanical injury. Useful for wiring in basements, laundries, dye housing, dairies and in other locations liable to be flooded.

Single Conductor—Solid

Size A.W.G. or MCM	No. and Mil Dia. of Wires	Rubber Wall 64ths	Lead Sheath 64ths	Approx. Outside Dia.	Approx. Net Wt. M Feet Pounds	Std. Length Per Reel
18*	.040	2	2	.19	92	1000′
16*	.051	2	2	.20	100	1000′
14	.064	2	2	.21	108	1000′
12	.081	2	2	.23	125	1000′
10	.102	3	3	.31	240	1000′
8	.128	4	3	.37	318	1000′
6	.162	4	4	.44	478	1000′

Single Conductor—Stranded

14	7x.0242	2	2	.22	114	1000′
12	7x.0305	2	2	.24	133	1000′
10	7x.0385	3	3	.34	272	1000′
8	7x.0486	4	3	.40	345	1000′
6	7x.0612	4	4	.46	517	1000′
4	7x.0772	4	4	.50	607	1000′
2	7x.0974	4	4	.56	755	1000′
1	19x.0664	5	4	.64	909	1000′
1/0	19x.0745	5	4	.68	1028	1000′
2/0	19x.0837	5	4	.73	1168	1000′
3/0	19x.0940	5	4	.78	1345	1000′
4/0	19x.1055	5	4	.84	1553	1000′
250	37x.0822	6	5	.98	2019	1000′
300	37x.0900	6	5	1.00	2247	1000′
350	37x.0973	6	5	1.06	2481	1000′
400	37x.1040	6	5	1.10	2707	1000′
500	37x.1162	6	5	1.19	3150	1000′
600	61x.0992	7	6	1.33	3983	500′
700	61x.1071	7	6	1.40	4418	500′
750	61x.1109	7	6	1.44	4641	500′
800	61x.1145	7	6	1.47	4848	500′
900	61x.1215	7	6	1.53	5265	500′
1000	61x.1280	7	6	1.59	5696	500′
1250	91x.1172	8	7	1.79	7248	500′
1500	91x.1284	8	7	1.91	8270	500′
1750	127x.1174	8	7	2.02	9287	500′
2000	127x.1255	8	7	2.13	10281	500′

*No. 18 and 16 Awg, manufactured for 300 volts only.

PARANITE DUPLEX-PARALLEL RUBBER AND LEAD CABLE

TYPE RDL—600 VOLTS

Duplex—Solid

Size A.W.G. or MCM	No. and Mil Dia. of Wires	Rubber Wall 64ths	Lead Sheath 64ths	Approx. Outside Dia.	Approx. Net Wt. M Feet Pounds	Std. Length Per Reel
18*	.040	2	2	.19x.33	145	1000′
16*	.051	2	2	.20x.35	165	1000′
14	.064	2	2	.21x.37	175	1000′
12	.081	2	3	.23x.40	206	1000′
10	.102	3	3	.32x.54	393	1000′
8	.128	4	3	.38x.67	526	1000′
6	.162	4	4	.44x.76	805	1000′

Duplex—Stranded

14	7x.0243	2	2	.22x.38	182	1000′
12	7x.0302	2	3	.24x.42	220	1000′
10	7x.0385	3	3	.33x.57	415	1000′
8	7x.0486	4	3	.40x.70	550	1000′
6	7x.0612	4	4	.47x.81	844	1000′
4	7x.0772	4	4	.52x.91	1045	1000′
2	7x.0972	4	4	.58x1.03	1310	1000′
1	19x.0664	5	5	.67x1.19	1860	1000′
1/0	19x.0745	5	5	.720x1.27	2120	1000′
2/0	19x.0837	5	5	.760x1.36	2395	1000′
3/0	19x.0940	5	5	.810x1.47	2730	1000′
4/0	19x.1055	5	5	.870x1.58	3120	500′

TYPE RML—600 VOLTS

Three-Conductor—Solid

18*	.040	2	3	.41	315	1000′
16*	.051	2	3	.44	345	1000′
14	.064	2	3	.45	363	1000′
12	.081	2	4	.49	419	1000′
10	.102	3	4	.64	715	1000′
8	.128	4	4	.77	950	1000′
6	.162	4	5	.87	1455	1000′

Three-Conductor—Stranded

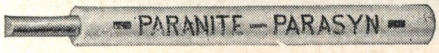
14	7x.0242	2	3	.47	390	1000′
12	7x.0305	2	3	.54	450	1000′
10	7x.0385	3	4	.67	760	1000′
8	7x.0486	4	4	.81	1015	1000′
6	7x.0612	4	5	.92	1520	1000′
4	7x.0772	4	5	1.03	1780	1000′
2	7x.0974	4	5	1.16	2240	1000′
1	19x.0664	5	6	1.33	2980	500′
1/0	19x.0745	5	6	1.42	3340	500′
2/0	19x.0837	5	6	1.52	3830	500′
3/0	19x.0940	5	6	1.63	4370	500′
4/0	19x.1055	5	7	1.79	5430	500′
250M	37x.0822	6	7	1.96	6320	500′
300M	37x.0900	6	7	2.08	7100	500′
350M	37x.0973	6	7	2.19	7830	500′
400M	37x.1040	6	8	2.32	9130	500′
500M	37x.1162	6	8	2.50	10550	600′

*For 300 volt service only.

PARANITE SMALL DIAMETER BUILDING WIRE

Type TW

600 Volts—60° C. (140° F.)



A small-diameter building wire is offered for use in new work and in rewiring of existing raceways to meet the requirements of the National Electrical Code (1953). Its smaller diameter makes it possible to add additional or larger capacity circuits in existing conduits or raceways.

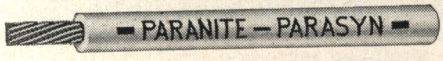
Size A.W.G.	Strands	Insulation 64ths	Approx. O.D. Inches	Size A.W.G.	Strands	Insulation 64ths	Approx. O.D. Inches
14	Sol.	2	.13	3/0	19	5	.63
12	Sol.	2	.15	4/0	19	5	.69
10	Sol.	2	.17	250	37	6	.76
8	Sol.	3	.22	300	37	6	.82
8	7	3	.24	350	37	6	.87
6	7	4	.31	400	37	6	.92
4	7	4	.36	500	37	6	1.00
2	7	4	.42	600	61	7	1.12
1	19	5	.49	750	61	7	1.23
1/0	19	5	.53	1000	61	7	1.37
2/0	19	5	.58				

PARANITE MACHINE TOOL WIRE

PARASYN® THERMOPLASTIC INSULATION 600 VOLTS*

PARASYN Machine Tool Wire meets the demand for a cable that can withstand exposure too severe for rubber insulated wires. For wiring machine tools, acid treating plants, chemical plants, and other applications exposing cables to deteriorating influences.

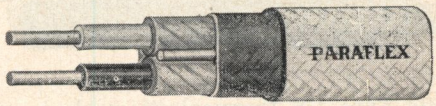
Underwriters' approved for 60° C. where exposed to oil and 80° C. in air operating temperature.



Size A.W.G. or CM	Strands	Heavy Insulation Wall Thick. 64ths	Heavy Insulation App. O.D. Inches	Heavy Insulation App. Net Wt. M Feet	Light Insulation Wall Thick 64ths	Light Insulation Approx. O.D. Inches	Light Insulation Approx. Net. Wt. M Feet
14	7	4	.19	27	3	.17	24
14	19	4	.19	27	3	.17	24
12	7	4	.21	37	3	.19	33
12	19	4	.21	37	3	.19	33
10	7	4	.23	51	3	.21	48
10	19	4	.23	51	3	.21	48
8	7	5	.28	80	4	.27	77
8	19	5	.28	80	4	.27	77
6	7	..	..	..	4	.31	113
6	19	..	..	..	4	.32	113
4	7	..	..	..	4	.36	168
4	19	..	..	..	4	.37	168
2	7	..	..	..	4	.42	251
2	19	..	..	..	4	.43	251
1	19	..	..	..	5	.50	324
0	19	..	..	..	5	.54	399
00	19	..	..	..	5	.58	493
000	19	..	..	..	5	.63	610
0000	19	..	..	..	5	.69	756

PARANITE NON-METALLIC SHEATHED CABLES

PARAFLEX® WITH TYPE TW THERMOPLASTIC INSULATED CONDUCTORS



Two Conductor—Parallel—600 Volts*

Without Ground

Size A.W.G.	Ampere Carrying Capacity	Stranding No. and Mil Dia. of Wire	Rubber Wall 64ths	Approx. Net Wt. M Feet	Std. Lgth. Coils
14	15	1x 64.08	2	64	250′ Ctn.
12	20	1x 80.81	2	80	250′ Ctn.
10	25	1x101.9	3	108	250′ Ctn.
8	35	7x 48.6	4	176	125′ Coil
6	50	7x 61.2	4	265	125′ Coil

With Ground Wire

14	15	1x 64.08	2	72	250′ Ctn.
12	20	1x80.81	2	92	250′ Ctn.
10	25	1x101.9	3	140	250′ Ctn.
8	35	7x 48.6	4	210	125′ Coil
6	50	7x 61.2	4	300	125′ Coil

Three Conductor—Round—600 Volts*

Without Ground

14	15	1x 64.08	2	90	250′ Coil
12	20	1x 80.81	2	112	250′ Coil
10	25	1x101.9	3	160	250′ Coil
8	35	7x 48.6	4	272	125′ Coil
6	50	7x 61.2	4	408	125′ Coil

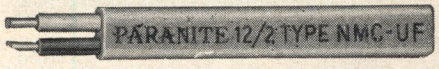
With Ground Wire

14	15	1x 64.08	2	96	250′ Coil
12	20	1x80.81	2	124	250′ Coil
10	25	1x101.9	3	176	250′ Coil
8	35	7x 48.6	4	350	125′ Coil
6	50	7x 61.2	4	450	125′ Coil

* Maximum 300 volts to ground or 600 volts between conductors.

PARANITE PARAFLEX®

TYPE NMC AND TYPE UF



Without Ground Wire

Size A.W.G.	Ampere Carrying Capacity	Approx. Net Wt. M Feet	Standard Length Coils
14/2	15	76	250′ Ctn.
12/2	20	100	250′ Ctn.
10/2	25	124	250′ Ctn.
14/3	15	112	250′ Coil
12/3	20	156	250′ Coil
10/3	25	180	250′ Coil

With Ground Wire

14/2	15	80	250′ Ctn.
12/2	20	104	250′ Ctn.
10/2	25	136	250′ Ctn.

This Multiple Conductor Cable is recognized as both Type UF Underground Feeder Cable and as Type NMC Non-Metallic Sheathed Corrosion and Moisture-Resistant Cable.

PARANITE TYPE UF CABLE

THERMOPLASTIC UNDERGROUND FEEDER CABLE



Paranite Type UF thermoplastic cable is recognized as Underground Feeder Cable for direct earth burial in branch or feeder circuits by the National Electrical Code and Underwriters' Laboratories. The cable is highly resistant to acids, alkalies, corrosive fumes, chemicals, lubricants and ground water. It is non-corroding, will not support combustion and is free from fungus attack.

Size A.W.G.	Insulation Thickness 64ths	Approx. O. D. Inches	Approx. Wt. Lbs. 1000 Ft.
14 Solid	4	19	23
12 Solid	4	21	37
10 Solid	4	23	51
8 Solid	5	28	80
6-7 Strand	5	35	121
4-7 Strand	5	39	175
2-7 Strand	5	46	262

Packaged: 500 foot coils or reels, if specified.

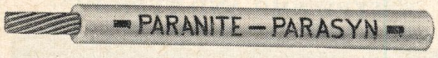
PARANITE PARASYN® FIXTURE WIRE

THERMOPLASTIC INSULATED CONDUCTOR FIXTURE WIRE

TYPES TF AND TFF

600 Volts—60°C.

Underwriters Approved



Soft drawn copper conductor insulated with Parasyn and without further covering.

Type TF

Size A.W.G.	No. Strands	Insulation 64ths	Approx. O.D. Inches	Approx. Net Wt. 1000 ft.	Std. Lgth. Feet Spools
18	Solid	2	.105	10	1000
18	7	2	.111	11	1000
16	Solid	2	.116	14	1000
16	7	2	.124	15	1000

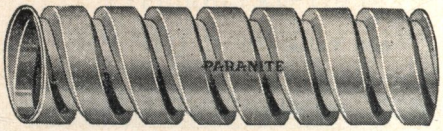
Type TFF

18	16	2	.113	11	1000
16	26	2	.126	15	1000

Standard Colors: Black, white, red, blue, green, yellow, orange, brown.

PARANITE FLEXIBLE STEEL CONDUIT

STEEL CONDUIT—SINGLE STRIP



Paranite flexible steel conduit is formed spirally in one continuous length of galvanized steel strip —interlocked construction. This type of construction permits greater flexibility and creates a continuous metal-to-metal grounding contact throughout the entire length of the conduit. May be used in place of rigid conduit. Useful for short runs in cramped locations where bends must be sharp or irregular.

Trade Size Inside Diameter	Actual Inside Dia.	Approx. Outside Diameter	Approx. Net Wt. M Feet	Std. Coil Lgth.	Approx. Shpg. Wt. Lbs.
5/16	.3125	.530	160	250′	40
3/8	.375	.570	195	250′	49
½	.625	.898	490	100′	49
¾	.8125	1.086	620	50′	31
1	1.0	1.363	1180	50′	59
1¼	1.250	1.625	1420	50′	71
1½	1.5	1.860	1800	25′	45
2	2.0	2.445	2280	25′	57
2½	2.5	2.953	2840	25′	71
3	3.0	3.400	3130	25′	75

SINGLE CONDUCTOR—BARE ARMORED GROUND WIRE

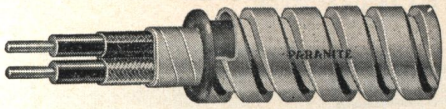


1. Tinned copper conductor. 2. Flexible steel armor — heavily zinc coated — interlocked construction. Paranite armored ground wire is used for grounding interior wiring systems where it is necessary to protect the copper conductor from mechanical injury. Tinning the copper wire facilitates soldering in lugs. It is especially useful in cramped locations where short, sharp or irregular conduit bends are not practical.

Size A.W.G.	Ampere Carrying Capacity	Stranding No. and Mil Dia. of Wires	Approx. Outside Dia.	Standard Lgth. Ft. Coil	Approx. Shpg. Wt. Lbs 1000 ft.
8	50	1x128.5	.294	250′	136
6	70	1x162.0	.322	250′	200
6	70	7x 61.2	.344	250′	200
4	90	1x204.3	.264	250′	241
4	90	7x 97.4	.291	250′	241

PARANITE ARMORED BUSHED-CABLES

TWO CONDUCTOR—TYPE AC—600 VOLTS



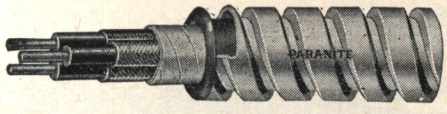
1 2 3 4 5 6

1. Tinned copper conductors. 2. Code rubber insulation. 3. Cotton braid saturated with moisture-resisting, flame-retarding compound — color coded. 4. Twisted conductors covered with tough, overlapping, saturated paper armor. 5. Anti-short bushing. 6. Flexible steel armor — Interlocked construction. For general lighting and power wiring in non-fireproof homes, either concealed or exposed in dry locations.

Size A.W.G.	Ampere Carrying Capacity	Stranding No. and Mil Dia. of Wires	Rubber Wall 64ths	App. Outside Dia.	Std. Lgth. Ft. Coil	App. Shpg. Wt. Lbs. 1000 Ft.
14	15	1x 64.08	2	.478	250′	216
12	20	1x 80.81	2	.513	250′	240
10	25	1x101.9	3	.605	250′	304
8	35	1x128.5	4	.828	150′	607
8	35	7x 48.6	4	.856	150′	607
6	50	7x 61.2	4	1.016	100′	700
4	70	7x 77.2	4	1.112	100′	850

THREE AND FOUR CONDUCTOR—TYPE AC

600 VOLTS



1 2 3 4 5 6

Paranite three and four-conductor armor bushed cables are constructed same as above. Anti-short bushings are additional protection against short circuits which may be caused by the sharp saw-cut edge of the steel armor. For concealed or exposed wiring in industrial plants and other buildings — dry locations only. Useful for fishwork on remodeling jobs. When exposed to dampness use type ACL.

Three Conductor Cables

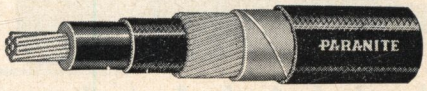
Size A.W.G.	Ampere Carrying Capacity	Stranding No. and Mil Dia. of Wires	Rubber Wall 64ths	App. Outside Dia.	Std. Lgth. Ft. Coil	App. Shpg. Wt. Lbs. 1000 Ft.
14	15	1x 64.08	2	.501	250′	236
12	20	1x 80.81	2	.537	250′	280
10	25	1x101.9	3	.642	250′	384
8	35	1x128.5	4	.877	150′	720
8	35	7x 48.6	4	.918	150′	732
6	50	7x 61.2	4	1.082	100′	850
4	70	7x 77.2	4	1.185	100′	1150

Four Conductor Cables

14	15	1x 64.08	2	.570	150′	272
12	20	1x 80.81	2	.610	250′	344
10	25	1x101.9	3	.787	150′	560
8	35	7x 48.6	4	1.017	100′	950
6	50	7x 61.2	4	1.210	100′	1050
4	70	7x 77.2	4	1.328	100′	1430

PARANITE SERVICE DROP CABLE

TWO CONDUCTOR—TYPE SD

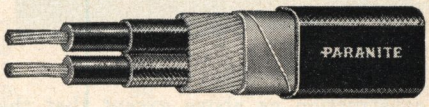


1 2 3 4 5 6

1. Tinned copper conductor. 2. High grade rubber insulation. 3. Cotton braid — saturated. 4. Tinned copper wires wrapped on helically. 5. Treated paper tape. 6. Cotton braid saturated with moisture-resisting, flame-retarding compound smoothly finished — black. Paranite concentric neutral tamper-proof drop cable combines the advantages of small dimensions, light weight, efficiency and economy.

Size AWG Stranded Insulated Conductor	Size AWG Concentric Neut.	Amp. Carrying Cap.	Stranding Insulated Conductor	Approx. Outside Diam.	Standard Lgth. Coil	App. Shpg. Wt. Lbs. 1000 Ft.
8	8	35	7x 48.6	.421	250′	254
6	8	50	7x 61.2	.459	250′	294
6	6	50	7x 61.2	.469	250′	325
4	4	70	7x 77.2	.532	150′	440

THREE CONDUCTOR—TYPE SD



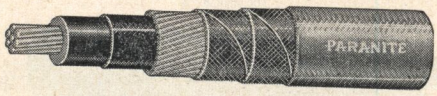
1 2 3 4 5 6

Same construction as above except that the two color-coded insulated conductors are laid parallel. Paranite drop cable installation, carries the entrance circuit from the pole to the house where it is joined to the entrance cable or in some localities it may be continued in an unbroken line to service entrance switch or meter when properly installed in rigid conduit. Concentric neutral cables are hard to tap.

Size AWG Stranded Insulated Conductor	Size AWG Concentric Neut.	Amp. Carrying Cap.	Stranding Insulated Conductor	Approx. Outside Diam.	Standard Lgth. Coil	App. Shpg. Wt. Lbs. 1000 Ft.
10 Sol.	10	25	7x38.5	.362x .606	250′	254
8	8	35	7x48.6	.418x .723	250′	360
6	8	50	7x61.2	.456x .779	200′	454
6	6	50	7x61.2	.464x .807	150′	486
4	6	70	7x77.2	.508x .895	150′	618
4	4	70	7x77.2	.519x .906	150′	668
2	4	90	7x97.4	.579x1.026	100′	857
2	2	90	7x97.4	.592x1.039	100′	937

PARANITE SERVICE ENTRANCE CABLE

TWO CONDUCTOR—TYPE SE STYLE U UNARMORED

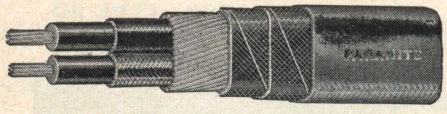


1. Tinned copper conductors. 2. High grade rubber insulation. 3. Cotton braid — saturated. 4. Tinned copper wires wrapped on helically. 5 and 6. Rubber-filled tapes. 7. Cotton braid saturated with moisture-resisting, flame-retarding compound, smoothly finished to take house paint readily and dusted. For service from pole to house, down to meter as both a drop and service entrance cable. Without conduit.

Rated for 75° C Operation

Size AWG Stranded Insulated Conductor	Size AWG Concentric Neut.	Amp. Carrying Cap.	Stranding Insulated Conductor	Approx. Outside Diam.	Standard Lgth. Coil	App. Shpg. Wt. Lbs. 1000 ft.
12 Sol.	12	20	1x 80.81	.359	250′	88
10 Sol.	10	25	1x101.9	.420	250′	128
8	8	35	7x 48.6	.496	250′	192
6	8	50	7x 61.2	.539	250′	240
6	6	50	7x 61.2	.549	200′	270
4	6	70	7x 77.2	.591	200′	325
4	4	70	7x 77.2	.605	150′	385

THREE CONDUCTOR—TYPE SE STYLE U UNARMORED



Same construction as above except that the two insulated conductors — color coded — are laid parallel. In Paranite service entrance cables the use of the bare neutral conductor over the insulated conductors not only reduces the cost but because of the difficulty of tapping the cable, prevents the unauthorized use of current. Continuous cables from pole to meter prevents further losses. Tape acts as an additional moisture seal.

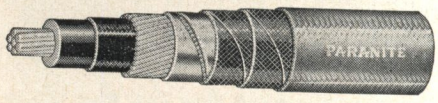
Rated for 75° C Operation

Size AWG Stranded Insulated Conductor	Size AWG Concentric Neut.	Amp. Carrying Cap.	Stranding Insulated Conductor	Approx. Outside Diam.	Standard Lgth. Coil	App. Shpg. Wt. Lbs. 1000 ft.
12 Sol.	12	20	1x 80.81	.367x .565	250′	136
10 Sol.	10	25	1x101.9	.419x .645	250′	200
8	8	35	7x 48.6	.493x .797	250′	320
6	8	50	7x 61.2	.530x .873	200′	420
6	6	50	7x 61.2	.538x .881	150′	460
4	6	70	7x 77.2	.582x .969	150′	560
4	4	70	7x 77.2	.593x .980	150′	640
2	4	90	7x 97.4	.635x1.100	100′	800
2	2	90	7x 97.4	.666x1.113	100′	860
3	5	100	.....	.....	150′	550
3	4	100	.....	.....	150′	580
3	3	100	.....	.....	150′	610
1	1	130	.....	.....	*	1054
1/0	1/0	150	.....	.....	*	1274

*1000′ reels.

PARANITE SERVICE ENTRANCE CABLE

TWO CONDUCTOR—TYPE SE STYLE A ARMORED

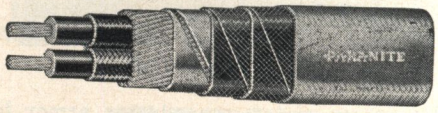


1. Tinned copper conductor. 2. High grade rubber insulation. 3. Cotton braid — saturated. 4. Tinned copper wires wrapped on helically. 5. Galvanized steel armor. 6 and 7. Rubber-filled tapes. 8. Cotton braid saturated with moisture-resisting, flame-retarding compound, smoothly finished to take house paint readily and dusted. Entrance cables with steel armor used from drop leads to entrance switch.

Rated for 75° C Operation

Size AWG Stranded Insulated Conductor	Size AWG Concentric Neut.	Amp. Carrying Cap.	Stranding Insulated Conductor	Approx. Outside Diam.	Standard Lgth. Coil	App. Shpg. Wt. Lbs. 1000 ft.
12 Sol.	12	20	1x 80.81	.383	250′	120
10 Sol.	10	25	1x101.9	.472	250′	160
8	8	35	7x 48.6	.520	250′	210
6	8	50	7x 61.2	.563	200′	310
6	6	50	7x 61.2	.573	150′	328
4	6	70	7x 77.2	.615	150′	415
4	4	70	7x 77.2	.629	150′	454

THREE CONDUCTOR—TYPE SE STYLE A ARMORED



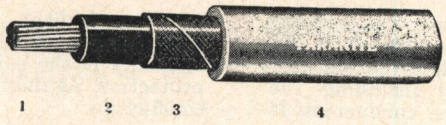
Paranite three-conductor service entrance cables are constructed same as above except that two color-coded conductors are laid parallel with the third conductor wrapped on helically forming a flat finished cable. The use of service entrance cables effect economies of first cost as well as low installation and maintenance costs as they eliminate the use of rigid conduit for service entrance installations.

Rated for 75° C Operation

Size AWG Stranded Insulated Conductor	Size AWG Concentric Neut.	Amp. Carrying Cap.	Stranding Insulated Conductor	Approx. Outside Diam.	Standard Lgth. Coil	App. Shpg. Wt. Lbs. 1000 ft.
12 Sol.	12	20	1x 80.81	.391x .565	250′	160
10 Sol.	10	25	1x101.9	.443x .669	250′	240
8	8	35	7x 48.6	.517x .821	250′	392
6	8	50	7x 61.2	.554x .897	200′	485
6	6	50	7x 61.2	.562x .915	150′	536
4	6	70	7x 77.2	.601x .993	150′	637
4	4	70	7x 77.2	.617x1.004	150′	730
2	4	90	7x 97.4	.677x1.124	100′	880
2	2	90	7x 97.4	.690x1.187	100′	940
3	5	100	.....	.....	150′	625
3	3	100	.....	.....	150′	650

PARANITE HYDRO-THERM® TYPE RR CABLE

NON-METALLIC NEOPRENE SHEATH—600 VOLTS



Hydro-Therm Type RR is a non-metallic cable designed for use in conduits, underground ducts and other raceways. Insulation on each conductor is a special moisture resisting and heat resisting compound. ARMOR is a tough vulcanized NEOPRENE jacket providing a rugged cable. The Neoprene Armor will withstand abrasion, is flame-retarding, acid, alkali, moisture and oil resisting. This cable for its recommended use is underwriters' laboratories approved and conforms to IPCEA-NEMA and ASTM Specifications.

For Use in Conduits, Underground Ducts and Other Raceways

Underwriters' Laboratories Type RH-75° or RW-60°

Meets ASTM Specifications **Meets NEMA Specifications** **Meets IPCEA Specifications**

AWG Size	Strands	Thickness 64ths Insul.	Thickness 64ths Jacket	Approx. OD (Inches)	Approx. Net Wt. Lbs. M Feet	Standard Package
		Single Conductor — Solid				
14	Solid	3	1	.210	33	2500 Ft. Reels
12	Solid	3	1	.225	43	2500 Ft. Reels
10	Solid	3	1	.245	58	2500 Ft. Reels
8	Solid	4	1	.300	90	2500 Ft. Reels
		Single Conductor — Stranded				
14	7	3	1	.217	35	2500 Ft. Reels
12	7	3	1	.235	46	2500 Ft. Reels
10	7	3	1	.260	62	2500 Ft. Reels
8	7	4	1	.320	96	2500 Ft. Reels
6	7	4	2	.380	139	1000 Ft. Reels
4	7	4	2	.430	198	1000 Ft. Reels
2	7	4	2	.490	289	1000 Ft. Reels
1	19	5	3	.590	385	1000 Ft. Reels
1/0	19	5	3	.660	478	1000 Ft. Reels
2/0	19	5	3	.700	578	1000 Ft. Reels
3/0	19	5	3	.750	702	1000 Ft. Reels
4/0	19	5	3	.810	855	1000 Ft. Reels
250MCM	37	6	4	.925	1044	1000 Ft. Reels
300MCM	37	6	4	.980	1219	1000 Ft. Reels
350MCM	37	6	4	1.030	1395	1000 Ft. Reels
400MCM	37	6	4	1.080	1567	1000 Ft. Reels
500MCM	37	6	4	1.160	1907	1000 Ft. Reels
600MCM	61	7	4	1.270	2283	1000 Ft. Reels
750MCM	61	7	4	1.380	2790	1000 Ft. Reels
1000MCM	61	7	4	1.530	3625	1000 Ft. Reels

Hydro-Therm Type RR is a heat and moisture resistant insulation approved by Underwriters' Laboratories as RW insulation for wet locations rated 60° C or as RH insulation for dry locations rated 75° C. Wire is surfaced marked RW60° C or RH75C° and bears Underwriters' Insulated Wire Labels.

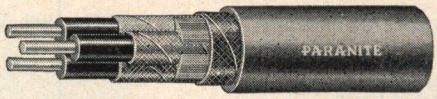
Standard Colors:

Sizes 14 to 10—Black, white, red, blue, green, yellow, orange, and brown.
8 to 2—Black, white and red.
1 and larger—Black.

Special Note:

Sizes #14 through 8 with 2/64 Neoprene Jacket can be supplied when needed.

PARANITE PARAUSE® TYPE RR CABLE
NON-METALLIC NEOPRENE SHEATH



Paranite RR cable is an all-rubber non-metallic underground cable suitable for direct burial in the earth, in conduit or ducts. It has taken the place of the older types of parkway cable including the fibrous covered and the metallic. The conductors of type RR are protected with a heat and moisture-resistant rubber insulation. The outer Neoprene jacket gives additional protection against moisture, elements in the soil, and acts as a cushion affording protection against injury to the current carrying conductors.

600 Volts

Size A.W.G. or CM	No. of Str.	Single Conductor Thickness 64ths Insul.	Jacket	Nominal O.D. Inches	Approx. Net Wt. Lbs. M Feet	Two Conductor Thickness 64ths Insul.	Jacket	Nominal O.D. Inches	Approx. Net Wt. Lbs. M Feet	Three Conductor Thickness 64ths Insul.	Jacket	Nominal O.D. Inches	Approx. Net Wt. Lbs. M Feet
Solid													
14	1	* 3	3	.255	45	3	3	.29x.49	99	* 3	5	.590	191
12	1	* 3	3	.275	56	3	3	.30x.51	120	* 3	6	.670	253
10	1	* 3	3	.295	72	3	4	.35x.57	167	* 3	6	.700	305
8	1	* 4	3	.355	107	4	4	.41x.70	244	* 4	6	.830	435
Strd.													
6	7	* 4	3	.410	153	4	4	.47x.81	350	* 4	7	.980	633
4	7	* 4	3	.455	212	..	..	.....	....	* 4	7	1.080	844
2	7	4	3	.515	305	..	..	.....	....	4	5	1.150	1080
1	19	5	4	.650	421	..	..	.....	....	5	6	1.340	1404
1/0	19	5	4	.690	483	..	..	.....	....	5	6	1.420	1667
2/0	19	5	4	.740	604	..	..	.....	....	5	6	1.530	1999
3/0	19	5	4	.790	728	..	..	.....	....	5	6	1.640	2401
4/0	19	5	4	.840	884	..	..	.....	....	5	7	1.790	2972
		600 Volt sizes 14 to 4/0 approved by Underwriters for Service Entrance.											
250	37	6	5	.960	1075	..	..	.....	....	..	.	.....	.....
300	37	6	5	1.010	1252	..	..	.....	....	..	.	.....	.....
350	37	6	5	1.060	1429	..	..	.....	....	..	.	.....	.....
400	37	6	5	1.110	1604	..	..	.....	....	..	.	.....	.....
500	37	6	5	1.190	1946	..	..	.....	....	..	.	.....	.....
		3000 Volts — Unshielded											
Solid													
8	1	* 7	3	.44	174	..	..	.....	....	* 7	5	1.06	697
6	1	* 8	4	.54	261	..	..	.....	....	* 8	5	1.20	994
Strd.													
6	7	* 8	4	.56	276	..	..	.....	....	* 8	5	1.23	1033
4	7	* 8	4	.61	351	..	..	.....	....	* 8	6	1.40	1342
2	7	8	4	.67	496	..	..	.....	....	8	6	1.52	1928
1	19	8	4	.71	564	..	..	.....	....	8	6	1.61	2158
1/0	19	8	4	.75	650	..	..	.....	....	8	6	1.70	2443
2/0	19	8	4	.80	767	..	..	.....	....	8	7	1.83	2850
3/0	19	8	5	.88	926	..	..	.....	....	8	7	1.94	3285
4/0	19	8	5	.94	1082	..	..	.....	....	8	7	2.06	4513
		5000 Volts — Unshielded											
Solid													
8	1	*10	4	.58	257	..	..	.....	....	10	5	1.26	1005
6	1	*10	4	.60	297	..	..	.....	....	10	6	1.34	1170
Strd.													
6	7	*10	4	.65	313	..	..	.....	....	10	6	1.48	1225
4	7	*10	4	.70	434	..	..	.....	....	10	6	1.59	1737
2	7	10	4	.76	538	..	..	.....	....	10	6	1.71	2097
1	19	10	4	.80	610	..	..	.....	....	10	7	1.82	2335
1/0	19	10	5	.87	736	..	..	.....	....	10	7	1.91	2693
2/0	19	10	5	.92	846	..	..	.....	....	10	7	2.01	3052
3/0	19	10	5	.97	974	..	..	.....	....	10	7	2.12	4182
4/0	19	10	5	1.03	1167	..	..	.....	....	10	7	2.24	4729

Single conductor, Sizes Nos. 10 to 500 MCM and two and three conductor Sizes Nos. 8 to 4/0 approved by Underwriters for Service Entrance.
*Sizes Nos. 14 through 4, 600 volt single and three conductor approved by Civil Aeronautics Administration for type "A" Airport Wiring in accordance with C.A.A. Specifications L-824.
Sizes No. 10 through No. 4, 3000 Volt, single and three conductor approved by C.A.A. for type "A" wiring in accordance with C.A.A. Specifications L-824.
Sizes No. 8 through No. 4, 3000 Volt and 5,000 Volt, single conductor approved by C.A.A. for type "B" wiring in accordance with C.A.A. Specification L-824.

PARANITE BARE AND URC WEATHERPROOF WIRES AND CABLES

TRIPLE BRAID AND BARE—APPROXIMATE WEIGHTS



The weatherproof covering conforms strictly to "URC" specifications and can be relied upon to meet severe climatic conditions. The nature of the asphalt and the method of application are such that both actual line and Weather-Ometer tests have proven unusual aging characteristics.

WIRES — SOLID

A.W.G. Size	Diameter Wire	Cross-Sectional Area Circular Mils	Cross-Sectional Area Square Inch	Pounds Per 1000 Feet Bare Wire	Pounds Per 1000 Feet Triple Braid	Pounds Per 1000 Feet Double Braid	Pounds Per Mile Bare Wire	Pounds Per Mile Triple Braid	Pounds Per Mile Double Braid
14	.06408	4,107	.003225	12.43	25	20	65.64	130	107
12	.08081	6,530	.005129	19.77	35	30	104.4	185	158
10	.1019	10,380	.008155	31.43	53	46	165.9	280	243
9	.1144	13,090	.01028	39.63	62	54	209.3	325	283
8	.1285	16,510	.01297	49.97	75	66	263.9	395	349
6	.1620	26,250	.02062	79.46	112	100	419.6	590	528
5	.1819	33,100	.02600	100.2	135	122	529.1	710	646
4	.2043	41,740	.03278	126.4	164	151	667.1	865	795
3	.2924	52,630	.04134	159.3	199	185	841.2	1,050	977
2	.2576	66,370	.05213	200.9	260	239	1,061	1,370	1,254
1	.2893	83,690	.06573	253.3	316	294	1,338	1,670	1,553
1/0	.3249	105,500	.08289	319.5	407	377	1,687	2,150	1,989
2/0	.3648	133,100	.1045	402.8	502	467	2,127	2,650	2,467
3/0	.4096	167,800	.1318	507.9	629	587	2,682	3,320	3,098
4/0	.4600	211,600	.1622	640.5	767	723	3,382	4,050	3,817

CABLES — STRANDED

Size A.W.G. or CM	No. of Wires	Cable Diameter Inches	Area Square Inch	Pounds Per 1000 Feet Bare Wire	Pounds Per 1000 Feet Triple Braid	Pounds Per 1000 Feet Double Braid	Pounds Per Mile Bare Wire	Pounds Per Mile Triple Braid	Pounds Per Mile Double Braid
8	7	.146	0.01297	50.97	78	68	269.1	410	359
6	7	.184	0.02062	81.05	115	103	427.9	610	544
5	7	.206	0.02600	102.2	140	126	539.6	740	668
4	7	.232	0.03278	128.9	170	155	680.5	900	820
3	7	.260	0.04134	162.5	206	190	858.1	1,090	1,004
2	7	.292	0.05213	204.9	270	246	1,082	1,425	1,301
1	7	.328	0.06573	258.4	328	303	1,364	1,735	1,599
1/0	7	.368	0.08286	325.7	424	388	1,720	2,240	2,051
2/0	7	.414	0.1945	410.9	522	482	2,169	2,760	2,544
3/0	7	.464	0.1318	518.1	653	604	2,736	3,450	3,190
4/0	7	:522	0.1662	653.3	800	745	3,450	4,220	3,935
250,000	19	.574	0.1964	771.9	985	907	4,076	5,200	4,788
300,000	19	.629	0.2356	926.3	1,174	1,083	4,891	6,200	5,721
350,000	19	.679	0.2749	1,081	1,345	1,248	5,706	7,100	6,589
400,000	19	.726	0.3142	1,235	1,553	1,436	6,521	8,200	7,584
450,000	37	.772	0.3534	1,389	1,724	1,601	7,339	9,100	8,452
500,000	37	.813	0.3927	1,544	1,894	1,765	8,151	10,000	9,318
600,000	37	.891	0.4712	1,853	2,235	2,093	9,781	11,800	11,052
700,000	61	.964	0.5498	2,161	2,650	2,471	11,410	14,000	13,045
750,000	61	.998	0.5890	2,316	2,822	2,635	12,230	14,900	13,913
800,000	61	1.031	0.6283	2,470	2,992	2,799	13,040	15,800	14,779
900,000	61	1.094	0.7069	2,779	3,332	3,127	14,670	17,600	16,513
1,000,000	61	1.152	0.7854	3,088	3,674	3,456	16,300	19,400	18,246
1,250,000	61	1.288	0.9817	3,859	4,508	4,264	20,380	23,800	22,516
1,500,000	61	1.411	1.178	4,631	5,380	5,098	24,450	28,400	26,915
1,750,000	91	1.526	1.374	5,403	6,193	5,894	28,530	32,700	31,119
2,000,000	91	1.630	1.571	6,175	7,008	6,690	32,600	37,000	35,323

BARE AND WEATHERPROOF WIRE IN PACKAGES

Soft Drawn Bare

Sizes #14 and #12	1000 Foot Coil in Carton
Size #10	500 Foot Coil in Carton
Sizes #8, #6, #4	250 Foot Coil in Carton

SOFT DRAWN WEATHERPROOF WIRE—Triple Braid (U.R.C.)

Neoprene or Polyethylene

Sizes #14 thru #10	500 Foot Coil in Carton
Sizes #8, #6, #4	500 Foot Coil Paper Wrapped

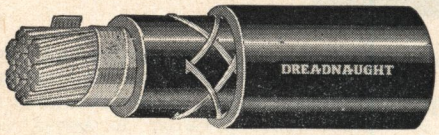
We manufacture the following types of Weatherproof Wire

Aluminum or Copper—Double or Triple Braid (Knitted)—Neoprene or Polythlene Covered

IF IT'S **PARANITE** IT'S RIGHT®

PARANITE DREADNAUGHT CABLES

SINGLE CONDUCTOR—HEAVY DUTY 600 VOLTS



1 2 3 4 5

1. Flexible tinned copper wires. 2. Cotton separator. 3. Rubber insulation. 4. Skeleton braid. 5. Heavy duty Neoprene jacket vulcanized in lead and polished. Dreadnaught single conductor heavy duty cables are designed for use wherever a flexible heavy duty portable cable is required, such as on gathering and mine locomotives, motor leads, etc. Cables with paper separators can be furnished.

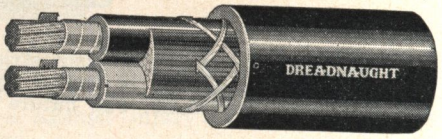
Size A.W.G. or MCM	Amp. Cap.	No. and Size of Wires	Approx. O.D. Inches	—Approx. Shpg. Wt.— Lbs. Per M Feet Coils	500-Ft. Reels	1000-Ft. Reels
18†*	7	42x#34	.18	48	50	72
16†*	10	70x#34	.19	52	54	76
14†	15	84x#33	.25	56	60	78
12†	20	84x#31	.26	62	68	85
10†	25	105x#30	.29	74	72	100
8	45	49x#25	.44	116	172	166
8	45	133x#29	.44	119	175	170
6	60	49x#23	.51	182	286	244
6	60	133x#27	.51	180	284	240
5	78	49x#22	.52	230	340	285
5	78	133x#26	.52	236	340	292
4	85	49x#21	.57	244	350	308
4	85	133x#25	.57	246	350	308
3	95	49x#20	.63	286	416	359
3	95	133x#24	.63	306	436	367
2	110	133x#23	.66	370	500	483
2	110	259x#26	.66	360	500	483
1	130	133x#22	.74	412	545	500
1	130	259x#25	.74	428	548	507
1/0	150	133x#21	.77	500	640	595
1/0	150	259x#24	.77	500	640	595
2/0	175	133x#20	.82	608	745	895
2/0	175	259x#23	.82	608	745	895
3/0	205	133x#19	.87	744	880	1025
3/0	205	259x#22	.87	744	880	1025
4/0	235	133x#18	.93	900	1075	1180
4/0	235	259x#21	.93	900	1075	1180
250	240	259x31.1‡	1.02			
250	240	427x24.2	1.02			
300	275	259x34.0	1.09			
300	275	427x26.5	1.07			
350	300	259x36.8	1.13			
350	300	427x28.6	1.14			
400	325	259x39.3	1.21			
400	325	427x30.6	1.22			
450	370	259x41.7	1.27			
450	370	427x32.5	1.27			
500	400	259x43.9	1.33			
500	400	427x34.2	1.31			
550	425	259x46.1	1.39			
550	425	427x35.9	1.38			
600	450	259x48.1	1.42			
600	450	427x37.5	1.44			
650	475	259x50.1	1.46			
650	475	427x39.0	1.47			
700	500	427x40.5	1.54			
700	500	637x33.1	1.54			
750	525	427x41.9	1.56			

Packed as Specified
Estimated Weights on Request

† Bare copper wires. *300-volt service. ‡Mils.

PARANITE DREADNAUGHT CABLES

TWO CONDUCTOR—HEAVY DUTY 600 VOLTS



1 2 3 4 5 6

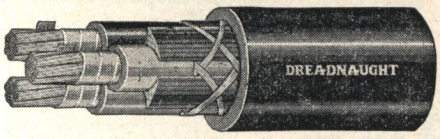
1. Flexible tinned copper wires. 2. Cotton separator. 3. Rubber insulation — color coded for identification. 4. Conductors cabled with jute fillers treated to prevent absorption of moisture. 5. Skeleton braid. 6. Heavy duty Neoprene jacket vulcanized in lead and polished. Dreadnaught power cables are vulcanized in lead under tons of hydraulic pressure which toughens the rubber jacket by closing the pores.

Size A.W.G.	Amp. Cap.	No. and Size of Wires	Approx. O.D. Inches	—Approx. Shpg. Wt.— Lbs. Per M Feet Coils	500-Ft. Reels	1000-Ft. Reels
18†*	7	42x#34	.390	68	177	124
16†*	10	70x#34	.405	80	188	136
14†	15	84x#33	.530	139	251	207
12†	20	84x#31	.605	178	311	251
10†	25	105x#30	.640	221	356	344
8	40	49x#25	.81	355	520	575
8	40	133x#29	.81	360	530	580
6	50	49x#23	.93	480	650	700
6	50	133x#27	.93	490	660	710
5	60	49x#22	1.01	580	880	885
5	60	133x#26	1.01	610	910	920
4	70	49x#21	1.08	675	1115	1070
4	70	133x#25	1.08	735	1175	1135
3	80	49x#20	1.17	885	1325	1285
3	80	133x#24	1.17	885	1325	1285
2	95	133x#23	1.27	1000	1560	1400
2	95	259x#26	1.27	1000	1560	1400
1	110	133x#22	1.44	1300	2100	1750
1	110	259x#25	1.44	1300	2100	1750
1/0	130	133x#21	1.52	1520	2320	1970
1/0	130	259x#24	1.52	1520	2320	1970
2/0	150	133x#20	1.65	1810	2610	2260
2/0	150	259x#23	1.65	1810	2610	2260
3/0	175	133x#19	1.77	2120	2920	2570
3/0	175	259x#22	1.77	2120	2920	2570
4/0	200	133x#18	1.92	2630	3530	3285
4/0	200	259x#21	1.92	2630	3530	3285

†Bare copper wires. *300-volt service.

PARANITE DREADNAUGHT® CABLES

THREE CONDUCTOR—HEAVY DUTY
600 VOLTS



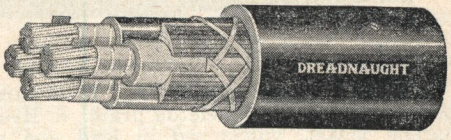
1. Flexible tinned copper wires. 2. Cotton separator. 3. Rubber insulation — color coded for identification. 4. Conductors cabled with jute fillers treated to prevent absorption of moisture. 5. Skeleton braid. 6. Heavy duty Neoprene jacket vulcanized in lead and polished.

Size A.W.G.	Amp. Cap.	No. and Size of Wires	Approx. O.D. Inches	—Approx. Shpg. Wt.— Per 1000 Ft. Lbs. Coils	500-Ft. Reels	1000-Ft. Reels
18†*	7	42x#34	.405	88	192	140
16†*	10	70x#34	.430	108	212	168
14†	15	84x#33	.560	184	304	244
12†	20	84x#31	.635	241	361	339
10†	25	105x#30	.690	333	453	543
8	35	49x#25	.91	485	650	700
8	35	133x#29	.91	500	670	720
6	50	49x#23	1.01	700	1140	1100
6	50	133x#27	1.01	710	1150	1110
5	60	49x#22	1.10	805	1245	1200
5	60	133x#26	1.10	820	1260	1210
4	65	49x#21	1.17	910	1350	1300
4	65	133x#25	1.17	935	1375	1335
3	75	49x#20	1.24	1120	1680	1520
3	75	133x#24	1.24	1120	1680	1520
2	90	133x#23	1.34	1345	1900	1745
2	90	259x#26	1.34	1345	1900	1745
1	100	133x#22	1.51	1700	2500	2150
1	100	259x#25	1.51	1700	2500	2150
1/0	120	133x#21	1.65	1990	2790	2440
1/0	120	259x#24	1.65	1990	2790	2440
2/0	135	133x#20	1.75	2385	3185	2820
2/0	135	259x#23	1.75	2385	3185	2820
3/0	155	133x#19	1.89	2840	3740	3490
3/0	155	259x#22	1.89	2840	3740	3490
4/0	180	133x#18	2.04	3480	4380	4130
4/0	180	259x#21	2.04	3480	4380	4130

†Bare copper wires. *300-volt service.

PARANITE DREADNAUGHT® CABLES

FOUR CONDUCTOR—HEAVY DUTY
600 VOLTS



1. Flexible tinned copper wires. 2. Cotton separator. 3. Rubber insulation — color coded for identification. 4. Conductors cabled with jute fillers treated to prevent absorption of moisture. 5. Skeleton braid. 6. Heavy duty Neoprene jacket vulcanized in lead and polished.

Size A.W.G.	Amp. Cap.	No. and Size of Wires	Approx. O.D. Inches	—Approx. Shpg. Wt.— Per 1000 Ft. Lbs. Coils	500-Ft. Reels	1000-Ft. Reels
18†*	7	42x#34	.435	123	227	183
16†*	10	70x#34	.485	171	275	231
14†	15	84x#33	.605	256	376	364
12†	20	84x#31	.665	334	454	442
10†	25	105x#30	.745	442	618	708
8	30	49x#25	.99	610	1050	1000
8	30	133x#29	.99	650	1090	1050
6	40	49x#23	1.10	880	1240	1200
6	40	133x#27	1.10	860	1300	1250
5	47	49x#22	1.19	950	1390	1350
5	47	133x#26	1.19	1050	1550	1450
4	55	49x#21	1.27	1100	1540	1500
4	55	133x#25	1.27	1240	1800	1640
3	65	49x#20	1.34	1475	2275	1925
3	65	133x#24	1.34	1475	2275	1925
2	75	133x#23	1.48	1740	2540	2190
2	75	259x#26	1.48	1740	2540	2190
1	85	133x#22	1.68	2160	2960	2610
1	85	259x#25	1.68	2160	2960	2610
1/0	100	133x#21	1.79	2540	3340	2990
1/0	100	259x#24	1.79	2540	3340	2990
2/0	115	133x#20	1.93	2985	3885	3630
2/0	115	259x#23	1.93	2985	3885	3630
3/0	130	133x#19	2.07	3695	4600	4345
3/0	130	259x#22	2.07	3695	4600	4345
4/0	150	133x#18	2.26	4510	5460	5160
4/0	150	259x#21	2.26	4510	5460	5160

†Bare copper wires. *300-volt service.

PARANITE DREADNAUGHT® CORDS

SINGLE CONDUCTOR—TYPE S

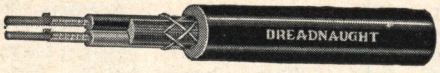


1 2 3 4 5

1. Flexible copper conductors. 2. Separator. 3. Rubber insulation. 4. Skeleton braid. 5. Heavy duty Neoprene jacket, vulcanized in lead and polished. Dreadnaught rubber cords are mold-cured so as to provide a smooth, dense, hard-wearing surface for use where severe conditions are encountered.

Size A.W.G.	Amp. Cap.	No. and Size of Wires	App. O.D. In.	App. Net Wt. Lbs	Approx. Shpg. Wt. Lbs. — Per M Feet 250' Coils	250' Spools	500' Coils	500' Rls.	1000' Rls.
18	7	42x#34	.183	44	...	...	48	...	97
16	10	70x#34	.193	45	...	...	49	...	99
14	15	84x#33	.248	47	...	...	52	...	105
12	20	84x#31	.263	51	...	...	57	...	107
10	25	105x#30	.288	75	...	...	82	...	132

TWO CONDUCTOR—TYPE S



1 2 3 4 5 6

1. Flexible copper conductors. 2. Separator. 3. Rubber insulation — color coded. 4. Conductors cabled with jute. 5. Skeleton braid. 6. Heavy duty Neoprene jacket, vulcanized in lead and polished. Dreadnaught all rubber cords are recommended for use wherever moisture is encountered.

Size A.W.G.	Amp. Cap.	No. and Size of Wires	App. O.D. In.	App. Net Wt. Lbs	Approx. Shpg. Wt. Lbs. — Per M Feet 250' Coils	250' Spools	500' Coils	500' Rls.	1000' Rls.
18	7	42x#34	.390	87	...	92	72	177	124
16	10	70x#34	.405	99	...	104	84	188	136
14	15	84x#33	.530	144	147	...	147	251	207
12	20	84x#31	.605	187	192	...	191	311	251
10	25	105x#30	.640	234	237	...	236	356	344

THREE CONDUCTOR—TYPE S



1 2 3 4 5 6

1. Flexible copper conductors. 2. Separator. 3. Rubber insulation — color coded. 4. Conductors cabled with jute. 5. Skeleton braid. 6. Jacketed with tough heavy duty Neoprene vulcanized in lead and polished. Dreadnaught cords are excellent for use in industrial plants.

Size A.W.G.	Amp. Cap.	No. and Size of Wires	App. O.D. In.	App. Net Wt. Lbs	Approx. Shpg. Wt. Lbs. — Per M Feet 250' Coils	250' Spools	500' Coils	500' Rls.	1000' Rls.
18	7	42x#34	.405	87	90	108	88	192	140
16	10	70x#34	.430	100	111	128	108	212	168
14	15	84x#33	.560	186	186	...	184	304	244
12	20	84x#31	.635	238	242	...	241	361	339
10	25	105x#30	.690	330	334	...	333	453	543

PARANITE DREADNAUGHT® CORDS

FOUR CONDUCTOR—TYPE S



1 2 3 4 5 6

1. Flexible copper conductors. 2. Separator. 3. Rubber insulation — color coded. 4. Conductors cabled with jute. 5. Skeleton braid. 6. Neoprene jacket, vulcanized in lead and polished. Dreadnaught cords guarantee the utmost durability, safe-handling and uninterrupted service.

Size A.W.G.	Amp. Cap.	No. and Size of Wires	App. O.D. In.	App. Net Wt. Lbs	Approx. Shpg. Wt. Lbs. — Per M Feet 250' Coils	250' Spools	500' Coils	500' Rls.	1000' Rls.
18	7	42x#34	.435	120	124	143	123	227	183
16	10	70x#34	.485	168	172	191	171	275	231
14	15	84x#33	.605	254	258	...	256	376	364
12	20	84x#31	.665	330	336	...	334	454	442
10	25	105x#30	.745	435	444	...	442	618	708

TWO CONDUCTOR—TYPE SJ



1 2 3 4 5 6

1. Flexible copper conductors. 2. Separator. 3 Rubber insulation — color-coded. 4. Conductors cabled with jute. 5. Skeleton braid. 6. Neoprene jacket, vulcanized in lead and polished. Dreadnaught light duty cords are for vacuum cleaners, washing machines, small motors, etc.

Size A.W.G.	Amp. Cap.	No. and Size of Wires	App. O.D. In.	App. Net Wt. Lbs	Approx. Shpg. Wt. Lbs. — Per M Feet 250' Coils	250' Spools	500' Coils	500' Rls.	1000' Rls.
18	7	42x#34	.300	45	47	55	47	...	...
16	10	70x#34	.325	62	65	75	65	...	...

THREE AND FOUR CONDUCTOR—TYPE SJ

1 2 3 4 5 6



1. Flexible copper conductors. 2. Separator. 3. Rubber insulation. 4. Conductors cabled with jute. 5. Skeleton braid. 6. Jacketed with tough Neoprene vulcanized in lead and polished. Dreadnaught light duty cords may be used with a good margin of safety.

Three Conductor

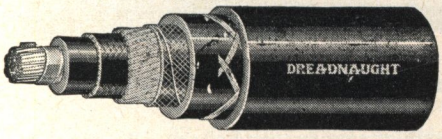
Size A.W.G.	Amp. Cap.	No. and Size of Wires	App. O.D. In.	App. Net Wt. Lbs	Approx. Shpg. Wt. Lbs. — Per M Feet 250' Coils	250' Spools	500' Coils	500' Rls.	1000' Rls.
18	7	42x#34	.330	70	74	85	74	...	...
16	10	70x#34	.355	94	98	100	98	...	...

Four Conductor

18	7	42x#34	.360	85	90	100	90	...	...
16	10	70x#34	.390	115	120	130	120	...	...

PARANITE DREADNAUGHT CABLES

TWO CONDUCTOR—CONCENTRIC—MINING MACHINE CABLES

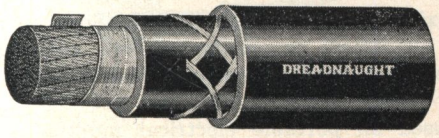


1 2 3 4 5 6 7 8

1. Tinned copper wires. 2. Separator. 3. Rubber insulation. 4. Cotton braid or rubber-filled tape. 5. Tinned copper wires — concentrically laid. 6. Rubber insulation. 7. Skeleton braid. 8. Heavy duty Neoprene jacket vulcanized in lead and polished. Dreadnaught mining cable is recommended for use on movable mining machine equipment such as loaders, cutters, conveyors, drills, locomotives, etc.

Size AWG	Amp. Cap.	No. and Size of Wires Inner Conductor	Outer Conductor	Approx. O.D. In.	Approx. Net Wt. M Feet	Approx. Shpg. Wt. Lbs. Per M Feet 250' Coils	500' Reels	1000' Reels
8	35	49x#25	32x#23	.635	335	.....	.....	.....
6	50	49x#23	32x#21	.770	370	374	470	425
6	50	133x#27	32x#21	.770	370	374	470	425
5	60	49x#22	32x#20	.810	465	469	575	515
4	70	49x#21	32x#19	.840	495	499	595	550
4	70	133x#25	32x#19	.840	495	499	595	550
3	80	133x#24	32x#18	.880	622	626	720	675
3	80	259x#27	32x#18	.880	622	626	720	675
2	90	133x#23	26x#16	.940	700	706	800	755
2	90	259x#26	26x#16	.940	700	706	800	755
1	100	133x#22	26x#15	1.060	883	890	890	740
1	100	259x#25	26x#15	1.060	883	890	890	740

HEAVY DUTY WELDING MACHINE CABLE



1 2 3 4 5

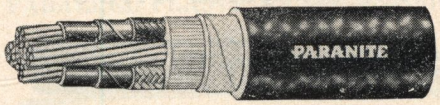
1. Flexible bare copper wires. 2. Cotton separator. 3. Rubber insulation (600 volts). 4. Skeleton braid. 5. Heavy duty Neoprene jacket vulcanized in lead and polished. Dreadnaught welding cable is used on stationary or movable welding machines for the supply of current from the machine to the electrode and requires extreme flexibility, light weight, moisture-proof qualities and resistance to abrasion.

Size A.W.G.	Stranding No. & Size of Wires	Approx. O.D. Inches	Approx. Net Wt. M Feet	Approx. Shpg. Wt. Per M Feet 500' Coils	500' Reels	1000' Reels
5	833x#34	.485	170	175	260	220
4	1078x#34	.520	210	212	318	292
3	1323x#34	.545	245	250	356	330
2	1666x#34	.585	292	296	398	354
1	2107x#34	.695	375	380	476	432
1/0	2646x#34	.745	455	460	572	558
2/0	3332x#34	.800	564	568	685	668
3/0	4214x#34	.865	725	730	860	950
4/0	5292x#34	.930	880	884	1000	1088

Welding Machine Cable Sizes

Size A.W.G.	Length of Cable in Feet — Up to 50 Ft.	50 to 100 Feet	100 to 250 Feet
4	75 Amps.	75 Amps.	75 Amps.
2	100-200 Amps.	100 Amps.	100 Amps.
1		200 Amps.	
1/0	300 Amps.		
2/0	400 Amps.	300 Amps.	200 Amps.
3/0	600 Amps.	400 Amps.	
4/0		600 Amps.	300 Amps.

PARANITE BUS-DUCT POWER CABLE



Construction: Three rubber insulated tinned copper conductors and one stranded tinned uninsulated ground conductor. Rubber insulated with code type R grade for 600 volts, color coded flame and moisture resistant braids. The four conductor cabled with jute fillers, covered with saturated fibrous tape, and overall a heavy durable loom weave with flame and moisture resistant finish.

Application: To connect motor operated machines with overhead Bus systems for power supply. Bus-Duct cable can be easily connected at any point with proper fittings which are made by several manufacturers.

Advantages: Flexibility—Durability—Resists deterioration by oil, grease and gasoline. Withstands lot of mechanical abuse, including impact without chafing or fraying. Has smooth exterior—presents neat appearance when suspended in the open. Economical installation. Grounding made easy with bare conductor.

Size A.W.G.	No. of Strands	Approx. Outside Diameter	Approx. Net Wt. M Feet	Approx. Shpg. Wt. Lbs. M Feet	Standard Packing on Reels
14	7	.580	160	210	1000'
12	7	.620	200	250	1000'
10	7	.700	290	370	1000'
8	7	.840	450	560	1000'
6	7	.920	610	720	1000'
4	7	1.030	820	1010	1000'
3	7	1.090	980	1170	1000'
2	7	1.160	1190	1380	1000'

VULCAN (PARANITE) WELDING MACHINE CABLE

SINGLE BELT—600 VOLTS

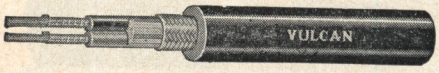


Single conductor, extremely flexible, bare copper, separator, tough durable jacket overall.

Size A.W.G.	No. and Size of Wires	Approx. O.D. Inches	Wt. Lbs. Per M Feet	Carrying Capacity Amperes	Volts Drop per M Feet
6	686x#34	.400	165	75	3.58
4	1078x#34	.495	265	100	3.18
3	1323x#34	.500	290	150	3.70
2	1666x#34	.560	350	200	3.92
1	2107x#34	.625	445	250	3.88
1/0	2646x#34	.675	525	300	3.72
2/0	3332x#34	.750	635	375	3.68
3/0	4214x#34	.815	765	450	3.51
4/0	5292x#34	.900	945	500	3.41

The above values for carrying capacity are based on a copper temperature of 60° C. and an ambient temperature of 40° C. and yield load factors of from approximately 32 per cent for the No. 2 Awg cable to approximately 23 per cent for the No. 3/0 Awg. cable and higher for the smaller sizes. The sizes of cables generally used range from No. 2 Awg. to No. 3/0 Awg. In actual service the load factor may be much higher than indicated without over-heating the cable as the ambient temperature will generally be substantially lower than 40° C.

VULCAN® (PARANITE) CORDS
TWO CONDUCTOR—TYPE S

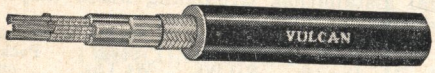


1 2 3 4 5 6

1. Flexible copper conductors. 2. Separator. 3. Rubber insulation — color-coded. 4. Conductors cabled with cotton fillers. 5. Cotton braid. 6. 40 per cent rubber jacket. Vulcan cords are for use on all portable electric machines, small motors, where subject to hard usage and dampness. Length of coil, 250 feet.

Size A.W.G.	Amp. Cap.	No. & Size of Wires	App. O.D. Inches	App. Net Wt. M Feet	Std. Pkg. Coils	Shpg. Wt. Lbs. Per M Feet
18	7	41x#34	.390	62	3	48
16	10	65x#34	.405	90	3	68
14	15	41x#30	.530	140	1	38
12	20	65x#30	.605	190	1	47
10	25	103x#30	.640	240	1	60

THREE CONDUCTOR—TYPE S



1 2 3 4 5 6

1. Flexible copper conductors. 2. Separator. 3. Rubber insulation — color coded. 4. Conductors cabled with cotton fillers. 5. Cotton braid. 6. 40 per cent rubber jacket. Vulcan three-conductor cords are for use on all portable electric machines, that require the additional safety of a third grounding conductor. Length of coil, 250 feet.

A.W.G. Size	Cap. Amp.	No. & Size of Wires	App. Inches O.D.	App. M Feet Net Wt.	Std. Coils Pkg.	Shpg. Wt. Lbs. M Feet Per
18	7	41x#34	.405	84	3	63
16	10	65x#34	.430	114	3	78
14	15	41x#30	.560	179	1	45
12	20	65x#30	.635	229	1	58
10	25	103x#30	.690	309	1	78

TWO CONDUCTOR—TYPE SJ



1 2 3 4 5 6

1. Flexible copper conductors. 2. Separator. 3. Rubber insulation — color-coded. 4. Conductors cabled with cotton fillers. 5. Cotton braid. 6. 40 per cent rubber jacket.

Vulcan-Lite duty cords are not listed, but widely used on small electric vacuum cleaners and electrical household appliances.

Vulcan-Junior cords are finished with a smooth rubber wall — no braids or covers to pick up dirt, lint, etc. For damp locations.

Standard package: 250-ft. coils.

Vulcan Type "SV"

Size A.W.G.	Amp. Cap.	No. & Size of Wires	App. O.D. Inches	App. Net Wt. M Feet	Std. Pkg. Coils	Shpg. Wt. Lbs. Per M Feet
18	7	41x#34	.250	36	5	46
		Vulcan-Junior Cords—Type SJ				
18	7	41x#34	.300	49	3	37
18	7	16x#30	.300	49	3	37
16	10	65x#34	.325	60	3	45
16	10	26x#30	.325	61	3	46

VULCAN® (PARANITE) CORDS
THREE CONDUCTOR—TYPE SJ



1 2 3 4 5 6

1. Flexible copper conductors. 2. Separator. 3. Rubber insulation — color coded. 4. Conductors cabled with cotton fillers. 5. Cotton braid. 6. 40 per cent rubber jacket. Vulcan-Junior all-rubber portable cord has the same general construction as for heavy duty except for thinner rubber wall. Length coils, 250 feet.

Size A.W.G.	Amp. Cap.	No. and Size of Wires	Approx. O.D. Inches	Approx. Net Wt. M Feet	Shpg. Wt. Lbs. M Feet	Std. Pkg. Coils
18	7	16x#30	.330	68	51	3
18	7	41x#34	.330	68	51	3
16	10	26x#30	.355	85	67	3
16	10	65x#34	.355	85	67	3

HOUSEHOLD CORD—TWO CONDUCTOR
TYPE SV



1. 2 3 4

1. Flexible copper conductors. 2. Separator. 3. Rubber insulation on conductors — color-coded. 4. 30 per cent rubber jacket. Paranite all-rubber portable cords without filler are not listed, but widely used on portable electrical appliances and equipment — moderate conditions. Length coils, 250 feet.

Size A.W.G.	Amp. Cap.	No. and Size of Wires	Approx. O.D. Inches	Approx. Net Wt. M Feet	Shpg. Wt. Lbs. M Feet	Std. Pkg. Coils
18	7	16x#30	.230	36	5	46
18	7	16x#30	.275	45	5	57
18	7	16x#30	.305	54	3	41
18	7	16x#30	.395	86	3	64
16	10	26x#30	.380	86	3	64
16	10	26x#30	.410	104	3	78

NEOPRENE SHEATHED PORTABLE CORDS



"Vulcaprene"®

All sizes of "Vulcan" Cords listed on this page can be supplied with Neoprene Sheath, cured by the new, Modern Continuous Vulcanizing (CV) Method.

PARANITE FLEXIBLE CORDS

PARALLEL ALL-RUBBER—TYPE POSJ-SP



1. Extra flexible copper conductors. 2. Separator. 3. Rubber insulation, applied over conductors to make a one-piece cord — by splitting ends in the center of the groove conductors can be tipped back very easily. Paranite Paratwin cord is easier to attach and has better appearance.

Furnished on 250-ft. spools. 10 spools to a carton, except size 16 Awg., 6 spools to carton

Size A.W.G.	Underwriters Type Letter	No. and Size of Wires	Rubber Wall 64ths	Approx. O.D. Inches	Shpg. Wt.Lbs. M Feet
18	POSJ-64SP1	41x#34	2	.125x.245	31
18	POSJ-32SP2	41x#34	3	.145x.295	35
16	POSJ-32SP2	65x#34	3	.170x.315	52

PARANITE FLEXIBLE CORDS

PARALLEL PLASTIC—TYPE POT-SPT



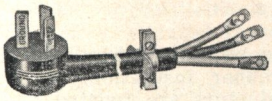
Soft annealed 34 copper, one tinned and one plain conductor, plastic integral insulation and jacket to permit easy separation into two separately insulated conductors. Furnished in black, white, and brown color. SPT-1 for 1/64" insulation. SPT-2 for 1/32" insulation.

Size A.W.G.	Underwriters Type Letter	No. and Size of Wires	Rubber Wall 64ths	Approx. O.D. Inches	Shpg. Wt. Lbs. M Feet
18	SPT1	41x#34	2	.117x.230	23
18	SPT2	41x#34	3	.148x.285	32
16	SPT2	65x#34	3	.162x.300	40

"SAFE" ELECTRICAL CORD SETS FOR RANGES AND CLOTHES DRYERS

Underwriters' Laboratories, Inc. Approval

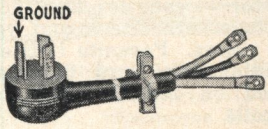
FOR ELECTRIC RANGES



RP 1-2

35 and 50 Ampere 250 Volt

FOR ELECTRIC CLOTHES DRYERS



RP 10 PG

30 Ampere 250 Volt

TYPE	LENGTH INCHES	WIRE	RATING	SHIPPING WEIGHT PER HUNDRED	STANDARD PACKAGE	SHIPPING WEIGHT PER STANDARD PACKAGE
RP1	36	2 No. 8—1 No. 10	35 Amp.—250 Volts	170 lbs.	20	34 lbs.
RP148	48	2 No. 8—1 No. 10	35 Amp.—250 Volts	180 lbs.	10	18 lbs.
RP160	60	2 No. 8—1 No. 10	35 Amp.—250 Volts	200 lbs.	10	20 lbs.
RP172	72	2 No. 8—1 No. 10	35 Amp.—250 Volts	230 lbs.	10	23 lbs.
RP2	36	2 No. 6—1 No. 8	50 Amp.—250 Volts	205 lbs.	20	41 lbs.
RP248	48	2 No. 6—1 No. 8	50 Amp.—250 Volts	210 lbs.	10	21 lbs.
RP260	60	2 No. 6—1 No. 8	50 Amp.—250 Volts	250 lbs.	10	25 lbs.
RP272	72	2 No. 6—1 No. 8	50 Amp.—250 Volts	290 lbs.	10	29 lbs.
RP10PG	36	3 Number 10	30 Amp.—250 Volts	150 lbs.	20	30 lbs.
RP48PG	48	3 Number 10	30 Amp.—250 Volts	160 lbs.	10	16 lbs.
RP60PG	60	3 Number 10	30 Amp.—250 Volts	170 lbs.	10	17 lbs.
RP72PG	72	3 Number 10	30 Amp.—250 Volts	190 lbs.	10	19 lbs.

These three wire electric cord sets have molded rubber cap molded on rubber jacketed cable and are complete with steel strain relief.

The 36" Cord sets are supplied in sturdy individual cartons.

PARANITE FLEXIBLE CORDS

BREWERY CORDS—TYPE CB*



1. Flexible copper conductors. 2. Separator. 3. Code rubber insulation. 4. Cotton braid over each conductor — one with raised marker for identification—saturated with moisture-resisting weatherproof compound finished — black. Conductors are twisted together. For portable use in damp places. 250-ft. coils.

Size AWG	Amp. Cap.	No. and Size of Wires	Rubber Wall 64ths	App. O.D. Inches	Approx. Net Wt. M Feet	Std. Pkg. Coils	Shpg. Wt. Lbs. M Ft.
18	5	16x#30	2	.250	27	4	27
16	7	26x#30	2	.308	37	4	37
14	15	41x#30	3	.425	60	3	45
12	20	66x#30	3	.460	85	3	63

* Not listed.

TWISTED PAIR—TYPE C



1. Flexible copper conductors. 2. Separator. 3. Code rubber insulation. 4. Cotton or rayon braid over each conductor — code for identification. Conductors twisted together. Green and yellow, black and all standard colors. Paranite twisted cords are for portables, extensions, cord fixtures, etc., dry places. Furnished on 250-ft. spools, except size 14 Awg. 250-ft. coils.

Size AWG	No. and Size of Wires	Rubber Wall 64ths	App. O.D. Inches	Approx. Net Wt. M Feet	Std. Pkgs. Spls.	Shpg. Wt. Lbs. M Ft.
18*	16x#30	1	.108C	18	6	29
18	16x#30	2	.135C	25	6	40
16	26x#30	2	.150C	33	6	38
14	41x#30	2	.198C	66	4	67

C=Cotton. *Not approved.

PARASYN® THERMOSTAT CABLE

THERMO-PLASTIC INSULATED CONDUCTOR

ANNUNCIATOR AND BELL WIRE FLAT PARALLEL CONSTRUCTION

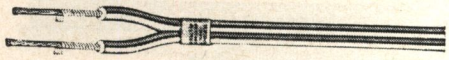


A white thermoplastic insulated parallel thermostat cable that strips and fishes easily. Insulation resists combustion and shortning to ground and between conductors. Using two and three conductor cables in combination will fill five conductor requirements. This construction is also recommended for electric bells and annunciators. A red longitudinal stripe on one conductor provides polarity identification.

Size AWG	Conductor Stranding	No. of Condrs.	Approx. Diam.	Approx. Wgt. Lbs. Per M Ft.	Standard Package
18	Solid	2	.073″x.150″	13	500′ Spools
18	Solid	3	.073″x.220″	20	500′ Spools
16	Solid	2	.084″x.171″	20	500′ Spools
16	Solid	3	.084″x.252″	30	500′ Spools

PARANITE HEATER CORDS

90° NEOPRENE—TYPE HPN



3000 Cycles, 300 Volts

90° Neoprene integral insulation; cotton separator, bunch stranded copper conductor.

Type HPN all Neoprene heater cord is a non-fraying, specialized heating appliance cord. For use on appliances rated at more than 50 watts and with surface heats no greater than 90°C (194°F.) likely to contact the cord. Flexibility is assured, with 3,000 cycle flextest. In addition, the Neoprene coverings, available in colors, allows for utmost in cleanliness and sanitation. The covering is absolutely impervious to oil, grease, liquids and may be quickly wiped clean and dry.

Size A.W.G.	No. and Size of Wires	Ins. Jacket 64ths	Approx. O.D. Inches	Approx. Net. Wt. M Ft.	Std. Pck. Coils	Shpg. Wt. Lbs. M Feet
18	41x#34	3	.17x.32	42	2	22
16	65x#34	3	.18x.33	52	2	27

BRAIDED—TYPE HPD



1. Flexible copper conductors. 2. Separator. 3. Unvulcanized rubber insulation. 4. Asbestos coverings. 5. Conductors are twisted and braided together with a soft or glazed cotton or rayon braid overall. 250-ft. coils.

Extra Flexible—3000 Cycles

Size A.W.G.	No. and Size of Wires	Rubber Wall 64ths	Approx. O.D. Inches	Approx. Net Wt. M Feet	Std. Pkg. Coils	Shpg. Wt.Lbs M Feet
18	41x#34	1	.290	27	5	36
16	65x#34	1	.315	35	5	45
14	104x#34	1	.345	48	3	36

Special Flexible—10,000 Cycles

18	65x#36	1	.310	30	5	40
16	104x#36	1	.335	38	5	53

PARANITE NEON SIGN—GAS TUBE, OIL BURNER IGNITION CABLE

TYPE GTO—THERMOPLASTIC



Bare stranded conductor, Polyethylene insulation, Thermoplastic jacket. Smaller diameter for easy installation, less weight, and less space. Smooth finish for easy pull through conduit. Suitable for either outdoor or indoor installations. Jacket is resistant to acids, alkalies, alcohol, gasoline, mineral oils, paraffin waxes, and water.

Size A.W.G.	Stranding	Type	Voltage	Nominal Diameter
14	19/27	GTO-10	10,000	.205
14	19/27	GTO-15	15,000	.245

PARANITE TELEPHONE WIRE
FOR INSIDE AND OUTSIDE



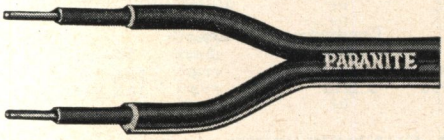
Twisted Pair



Parallel



Parallel Reinforced



Parallel Dumbbell

No. 18 COPPERWELD
Neoprene Jacketed—Rubber Insulated

Size AWG and No. of Cond.	Cat. No.	Construction	Wt. Lbs. M Feet	Packing Coils
18/2	218DW666	Twisted Pair	35	1000′
18/2	218DW866	Parallel	35	1000′
18/2	218DW766	*Parallel Rein.	40	1000′
18/2	218DW966	Parallel Dumbbell	30	1000′

* Has Reinforced Fibrous Cover Under Jacket.

No. 17 BRONZE
Neoprene Jacketed—Rubber Insulated

17/2	217DZ666	Twisted Pair	40	1000′
17/2	217DZ866	Parallel	40	1000′
17/2	217DZ766	*Parallel Rein.	45	1000′
17/2	217DZ966	Parallel Dumbbell	35	1500′

* Has Reinforced Fibrous Cover Under Jacket.

HARD DRAWN COPPER
Neoprene Jacketed—Outside Distributing Wire

16/2	216DH666	Twisted Pair	50	1000′
14/2	214DH666	Twisted Pair	70	1000′

Underground Burial Wire—Hard Copper

16/2	216UH666	Twisted Pair	58	750′
14/2	214UH666	Twisted Pair	82	750′
12/2	212UH666	Twisted Pair	112	750′



Vinyl Plastic Insulated Interior Wire

22/2	222XC685	▲Twisted Pair	10	1000′
22/3	322XC685	▲Triplex	15	1000′
19/2	219XC685	▲Twisted Pair	15	1000′
19/3	319XC685	▲Triplex	23	1000′

▲ Polarized Ivory, Brown or Green over bright soft copper.

Vinyl Plastic Insulated Duct Wire

22/2	222XC685	★Twisted Pair	10	1000′
22/3	322XC685	★Triplex	15	1000′
19/2	219XC685	★Twisted Pair	15	1000′
19/3	319XC685	★Triplex	23	1000′

★ Polarized over bright soft copper.
2—Conductor Coded Red and Green.
3—Conductor Coded Green and Yellow.

PARANITE TELEPHONE WIRE
FOR INSIDE AND OUTSIDE

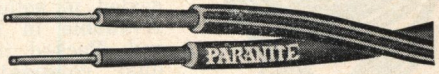


Vinyl Plastic Jacketed, Brown or Ivory

Size AWG and No. of Cond.	Cat. No.	Construction	Wt. Lbs. M Feet	Packing Coils
22/4	422NC484	*Vinyl Insulation	25	1000′
22/3	322NC484	*Vinyl Insulation	20	1000′
22/2	222NC484	*Vinyl Insulation	18	1000′

* Polarized over bright soft copper.
2—Conductor Coded Red and Green.
3—Conductor Coded Red, Green and Ivory.
4—Conductor Coded Red, Green, Ivory and Black.

BRIDLE WIRE



Soft Tinned Copper
Neoprene Jacketed—Rubber Insulated

18/2	218BC666	Twisted Pair	30	1000′
20/2	220BC666	Twisted Pair	25	1000′
18/2	318BC666	Triplex	45	1000′
20/3	320BC666	Triplex	38	1000′

STATION WIRE



Neoprene Jacketed, Brown

22/2	222NC876	*Neoprene Insulation	26	1000′
22/3	322NC876	*Neoprene Insulation	28	1000′
22/4	422NC876	*Neoprene Insulation	37	1000′

*Polarized over tinned soft copper.
2—Conductor Coded Red and Green.
3—Conductor Coded Red, Green and Ivory.
4—Conductor Coded Red, Green, Ivory and Black.

GROUND WIRE

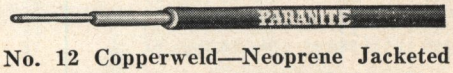


Vinyl Plastic Insulation

14/1	114GC585	†Solid Soft Copper	20	500′
12/1	112GC585	†Solid Soft Copper	30	500′
6/1	106GC585	‡7 Str. Soft Copper	90	500′

† Black, White. ‡ Black.

TREE WIRE



No. 12 Copperweld—Neoprene Jacketed

12/1	112TW566	Rubber Insulation	50	1000′

JUMPER WIRE



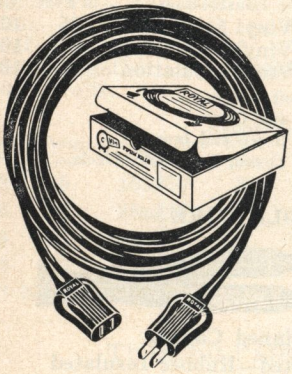
Tinned Soft Copper—Vinyl Plastic Insulated

22/2	222YC685	★Twisted	8	1000
22/3	322YC685	★Twisted	12	1000′
22/4	422YC685	★Twisted	16	1000′

★ Available colors—Red, White, Blue, Black, Yellow.

ROYAL ELECTRIC CORD SETS

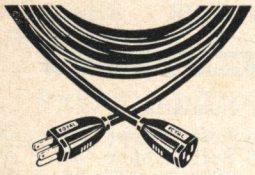
"POWR-KORD" 2-CONDUCTOR HEAVY DUTY EXTENSION CORDS



UL listed. Rubber-jacketed Type SJ or S portable cords for indoor and outdoor power tools, appliances and many other uses. Heavy duty, molded-on rubber caps and connectors. Built-in strain-reliefs. Blades and contacts sealed in solid rubber. Available in black or red. Packed in individual corrugated cartons.

Cat. No.	Color	Size and Type Cord	Length Feet	Shipping Quan.	Carton lbs.
M-45215	Black	No. 18 Type SJ	15	25	26
M-45225	Black	No. 18 Type SJ	25	24	44
M-45250	Black	No. 18 Type SJ	50	12	35
M-45200	Black	No. 18 Type SJ	100	6	34
M-45325	Black	No. 16 Type SJ	25	24	50
M-45350	Black	No. 16 Type SJ	50	12	44
M-45300	Black	No. 16 Type SJ	100	6	44
M-52150	Black	No. 14 Type S	50	6	50
M-52100	Black	No. 14 Type S	100	4	66
M-1825	Red	No. 18 Type SJ	25	24	44
M-1850	Red	No. 18 Type SJ	50	12	35
M-1625	Red	No. 16 Type SJ	25	24	50
M-1650	Red	No. 16 Type SJ	50	12	44
M-16100	Red	No. 16 Type SJ	100	6	44

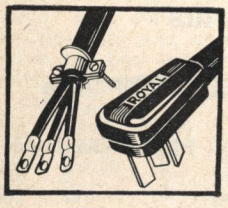
"POWR-KORD" 3-CONDUCTOR HEAVY DUTY EXTENSION CORDS



UL listed. Rubber-jacketed Type SJ cord. Molded-on cap, parallel blades with round ground pin. Molded-on connector with U-shaped ground slot. Complies with UL and NEMA standards for grounding power tools. Black only. Packed in individual corrugated cartons.

Cat. No.	Length Feet	Size and Type Cord	Shipping Quan.	Carton lbs.
M-6025	25	No. 18 Type SJ	24	45
M-6050	50	No. 18 Type SJ	12	40
M-6125	25	No. 16 Type SJ	24	55
M-6150	50	No. 16 Type SJ	12	50

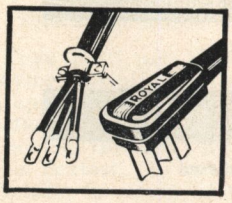
RANGE CORD SETS



UL listed. Heavy duty cord with molded-on range plug. Adjustable strain-relief. Rubber-jacketed type SR range cable. Conductors soldered to blades assuring permanent contact. Color coded conductor, numbered terminals. Packed in individual corrugated cartons.

Cat. No.	Conductor Sizes	Length Feet	Rating	Shipping Quan.	Carton lbs.
M-4000	2 #6-1 #8	3	50A-250V	12	26
M-4001	2 #8-1 #10	3	35A-250V	12	23

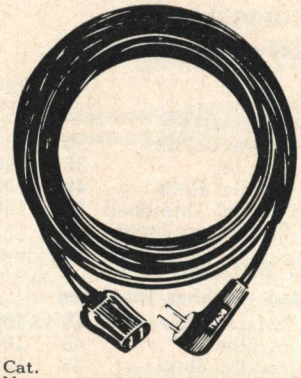
DRYER CORD SETS



UL listed. L-shape grounding blade fits standard dryer receptacles. Rubber-jacketed Type SR cable. Conductors are soldered to blades which are permanently sealed in molded rubber body. Conductors run full length of terminal, can't pull out. Packed in individual corrugated cartons.

Cat. No.	Conductor Sizes	Length Feet	Rating	Shipping Quan.	Carton lbs.
M-3899	3 #10	3	30A-250V	12	21
M-3900	3 #10	4	30A-250V	12	25

AIR CONDITIONER EXTENSION CORDS



UL listed. No. 14 Type S gray rubber cord with molded-on gray cap and connector, to match factory components. For window air conditioners rated either 125 or 250 volts.

2-CONDUCTOR 15Amp—250 Volt

Cat. No.	Length Feet	Shipping Quan.	Carton lbs.
M-1406	6	12	15
M-1408	8	12	19
M-1410	10	12	22

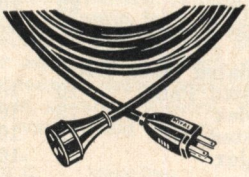
3-CONDUCTOR



15 Amp—125 Volt

Cat. No.	Length Feet	Shipping Quan.	Carton lbs.
M-1506	6	12	17
M-1508	8	12	21
M-1510	10	12	25

3-CONDUCTOR

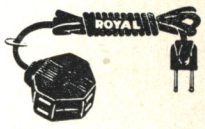


15 Amp—250 Volt

Cat. No.	Length Feet	Shipping Quan.	Carton lbs.
M-1706	6	12	17
M-1708	8	12	21
M-1710	10	12	25

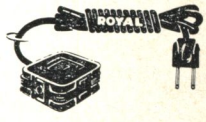
ROYAL ELECTRIC CORD SETS

BLUE LABEL CUBE TAP EXTENSIONS



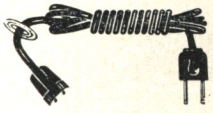
All-vinyl. Guaranteed unbreakable. UL listed. No. 18 SPT-1 vinyl cord. Vinyl cube tap with double wipe contacts locked in solid vinyl. Molded-on vinyl plug. Available in brown or ivory.

Cat. No.	Length Feet	Color	Shipping Carton Quan.	lbs.
K-5501	6	Brown	50	14
K-5502	9	Brown	50	18
K-5503	12	Brown	50	22
K-5504	15	Brown	50	27
K-5505	20	Brown	50	33
K-5601	6	Ivory	50	14
K-5602	9	Ivory	50	18
K-5603	12	Ivory	50	22
K-5604	15	Ivory	50	27
K-5605	20	Ivory	50	33



Modern bakelite cube tap. UL listed. No. 18 SPT-1 vinyl cord. Molded-on vinyl plug. Brown or ivory.

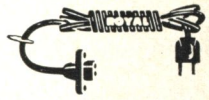
Cat. No.	Length Feet	Color	Shipping Carton Quan.	lbs.
K-5301	6	Brown	100	23
K-5302	9	Brown	100	30
K-5303	12	Brown	100	36
K-5304	15	Brown	50	22
K-5305	20	Brown	50	28
K-5401	6	Ivory	100	23
K-5402	9	Ivory	100	30
K-5403	12	Ivory	100	36
K-5404	15	Ivory	50	22
K-5405	20	Ivory	50	28



UL listed. Molded plastic female connector, No. 18 SPT-1 plastic cord; molded-on plastic plug. Brown or ivory.

Cat. No.	Length Feet	Color	Shipping Carton Quan.	lbs.
K-5001	6	Brown	100	21
K-5002	9	Brown	100	28
K-5011	6	Ivory	100	21
K-5012	9	Ivory	100	28

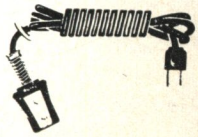
TELEVISION CORD



UL listed. Brown plastic molded-on TV connector; No. 18 SPT-1 plastic cord and molded-on plastic cap.

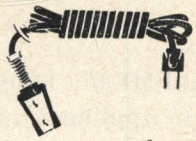
Cat. No.	Length Feet	Color	Shipping Carton Quan.	lbs.
K-3701	6	Brown	100	17
K-3702	9	Brown	100	22

APPLIANCE CORD SETS



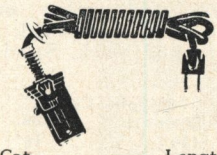
UL listed. No. 18 Type HPN neoprene-jacketed parallel heater cord. Standard bakelite plug, 11/16″ between contact centers. Molded-on cap.

Cat. No.	Length Feet	Shipping Carton Quan.	lbs.
K-1100	6	100	33



UL listed. Same as K-1100, but with miniature plug, ½″ between contact centers.

Cat. No.	Length Feet	Shipping Carton Quan.	lbs.
K-1101	6	100	33



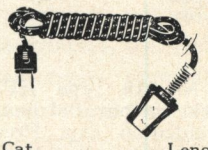
UL listed. No. 18 Type HPN neoprene-jacketed parallel heater cord. Strain-relief, positive action switch appliance plug. Molded-on cap.

Cat. No.	Length Feet	Shipping Carton Quan.	lbs.
K-1102	6	100	34



No. 18 3000 cycle type HPD heater cord. Tested strain-relief, bakelite miniature plug, ½″ between contact centers. Molded-on cap.

Cat. No.	Length Feet	Shipping Carton Quan.	lbs.
K-2100	6	100	31



UL listed. Same as K-2100, but with standard plug, 11/16″ between contact centers.

Cat. No.	Length Feet	Shipping Carton Quan.	lbs.
K-2101	6	100	32



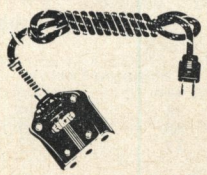
UL listed. No. 18 3000 cycle type HPD heater cord. Strain-relief, positive action switch appliance plug. Molded-on cap.

Cat. No.	Length Feet	Shipping Carton Quan.	lbs.
K-2105	6	100	37



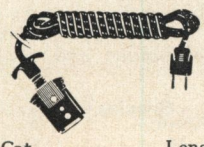
UL listed. No. 18 extra flexible type HPD heater cord. Armored switch appliance plug with KOOL-PULL handle. Molded-on cap.

Cat. No.	Length Feet	Shipping Carton Quan.	lbs.
K-2107	6	100	41



UL listed. Broiler cord set. No. 18 3000 cycle type HPD heater cord. Strain-relief, positive action 2-heat broiler plug, ⅞″ between contact centers. Molded-on cap.

Cat. No.	Length Feet	Shipping Carton Quan.	lbs.
K-2111	6	100	49



UL listed. Roaster cord set. No. 16 3000 cycle type HPD heater cord. Strain-relief, positive action roaster plug, $1\frac{1}{16}$″ between contact centers. Molded-on cap.

Cat. No.	Length Feet	Shipping Carton Quan.	lbs.
K-2501	6	100	43

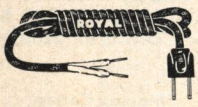
ROYAL ELECTRIC CORD SETS

POWER SUPPLY REPLACEMENT CORDS for Lamps, Radios, Heaters, Appliances, etc.



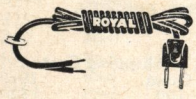
UL listed. No. 18 type SPT-1 plastic cord. Molded-on plastic cap on one end; other end stripped, twisted and tinned. In brown, ivory and black. Specify color.

Cat. No.	Length Feet	Shipping Carton Quan.	lbs.
K-2701	6	100	16
K-2702	9	100	23
K-2703	12	50	15
K-2704	15	50	19



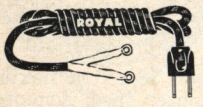
UL listed. No. 18 3000 cycle type HPD glazed cotton heater cord. Molded-on cap. Conductors stripped 1½", tinned, and bound with asbestos.

Cat. No.	Length Feet	Shipping Carton Quan.	lbs.
K-3000	6	100	23



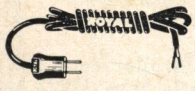
UL listed. No. 18 type HPN neoprene-jacketed parallel heater cord. Molded-on cap. Free-end conductors stripped, twisted and tinned.

Cat. No.	Length Feet	Shipping Carton Quan.	lbs.
K-3010	6	100	28



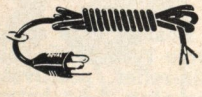
UL listed. No. 18 3000 cycle type HPD sfot cotton heater cord. Molded-on cap. Conductors stripped 1½", tinned, bound with asbestos and eyelets attached.

Cat. No.	Length Feet	Shipping Carton Quan.	lbs.
K-3018	7	100	27



UL listed. No. 18 type SJ rubber-jacketed portable cord. Molded-on, heavy duty rubber cap. Color, black.

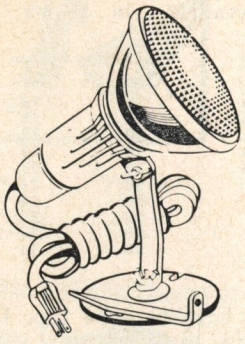
Cat. No.	Length Feet	Shipping Carton Quan.	lbs.
K-5100	6	48	19
K-5101	10	48	29
K-5102	20	24	27



UL listed. No. 18 type SJ 3-conductor rubber-jacketed cord. Molded-on rubber 3-wire cap with parallel blades and round ground pin.

Cat. No.	Length Feet	Shipping Carton Quan.	lbs.
K-5135	6	48	23
K-5137	9	48	32
K-5139	12	48	42

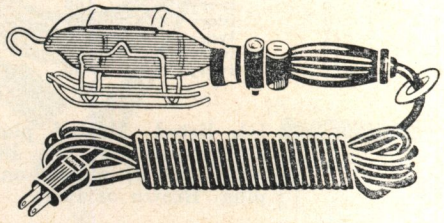
ALL-PURPOSE SPOT and FLOODLIGHT HOLDER



UL listed. Lightweight aluminum, weatherproof, dual-mounting, won't rust. Porcelain socket. Can be mounted with base plate or spiked into ground. Will focus to any position. Type SJT plastic-jacketed cord. For use with PAR 38 and PAR 40 bulbs. Individually packaged (less bulb).

Cat. No.	Cord Length	Shipping Carton Quan.	lbs.
565	6′	12	13

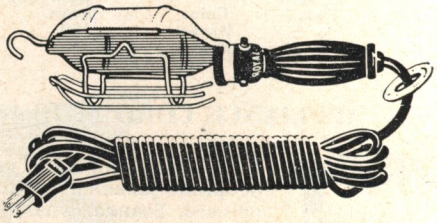
ROYAL "SEALED TIGHT" TROUBLE LITES



UL listed. Rubber-jacketed type SJ cord. Molded-on heavy-duty plug. Molded rubber handle with two side outlets. Rubber locked lamp socket protects switch and contacts. Push-thru switch encased in rubber. Sealed tight at all joints to prevent bulb, switch or contact failure. Swing-open heavy duty guard.

Cat. No.	Length Feet	Size and Type Cord	Shipping Carton Quan.	lbs.
J-3136	25	No. 18 Type SJ	12*	28
J-3137	50	No. 18 Type SJ	6*	23

*Packed in individual corrugated cartons.



Same as above except no side outlets on handle.

Cat. No.	Length Feet	Size and Type Cord	Shipping Carton Quan.	lbs.
K-3102	25	No. 18 Type SJ	12	28
K-3103	50	No. 18 Type SJ	6	22

SECTION 3

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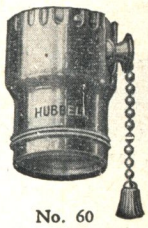
Transformer, portable, step-down 226

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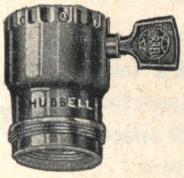
HUBBELL BRASS SOCKETS

STANDARD SOCKET BODIES

BRUSH BRASS FINISH



No. 60



No. 61



No. 62

250 Watts, 250 Volts

Cat. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
60	Pull Body	25	250	33
61	Key Body	25	250	44

660 Watts, 250 Volts

62	Keyless Body	25	250	34

STANDARD SOCKET CAPS

BRUSH BRASS FINISH



No. 411



No. 413



No. 418

Cat. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
411	Female, ⅛" Cap	25	250	11
413	Female, ⅜" Cap	25	100	6
419	Female, ½" Cap	25	50	4
418	Angle, ⅛" Cap	25	50	4
420	Angle, ⅜" Cap	25	50	5



No. 414



No. 415

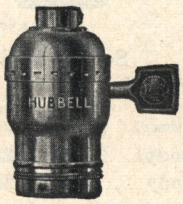
Cat. No.	Description	Carton	Std. Pkg	Wt., Lbs. Std. Pkg.
414	Pendant	25	250	8
415	Pendant, Cord Grip .375 to .500" Cord	25	100	12

STANDARD ASSEMBLED BRASS SHELL SOCKETS

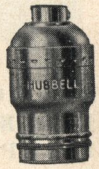
BRIGHT DIP FINISH ONLY



No. 2618



No. 2664



No. 2667

Pull—250 Watts—250 Volts

Cat. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
2618	With ⅛" Cap	25	250	42
2632	With ⅜" Cap	25	250	35
2620	With Pendant Cap	25	250	50

Key—250 Watts, 250 Volts

2664	With ⅛" Cap	25	250	55
2634	With ⅜" Cap	25	250	54
2666	With Pendant Cap	25	250	50

Keyless—660 Watts, 250 Volts

2667	With ⅛" Cap	25	250	45
2635	With ⅜" Cap	25	250	45
2669	With Pendant Cap	25	250	42

ELECTROLIER SOCKET BODY AND CAP

BRUSH BRASS FINISH

660 Watts, 250 Volts



No. 73



No. 441

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.
73	Short Shell Keyless Body	25	250	26
441	Female, ⅛" Cap	25	250	11

Pull sockets are regularly equipped with 6½-inch chains; pull switches, with short chain and 4-foot black cords. Standard length of keys for all key sockets is 1 inch.

HUBBELL WIRING DEVICES

BRASS SHELL Threaded-Catch SOCKETS


No. 1639

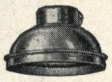

No. 1637


No. 1638

Socket Bodies

250 WATTS, 250 VOLTS

Cat. No.	Description	Carton	Std. Pkg.	Wt.,Lbs. Std. Pkg.
1637	Key Body.....	25	250	49
1639	Pull Body.....	25	250	45
	660 WATTS, 250 VOLTS			
1638	Keyless Body..	25	250	39


No. 1630


No. 1632

Socket Caps

1630	⅛" Cap.....	25	250	10
1632	⅜" Cap.....	25	100	13
1634	Pendant Cap...	25	250	13


No. 1634

Fits cords .375" to .500" diameter.

2502	Pendant Cap, Cord Grip.....	25	100	8


No. 2502

Threaded ring is included as part of socket body. Standard finish is brush brass.

PORCELAIN SOCKET BODIES

Two Screw Type


No. 160


No. 161


No. 162

Porcelain Socket Bodies

Cat. No.	Description	Carton	Std. Pkg.	Wt.,Lbs. Std. Pkg.
160	Pull Body, 250 Watts, 250 V.	10	100	31
161	Key Body, 250 Watts, 250 V.	10	100	25
162	Keyless Body, 660 Watts, 250 Volts.....	10	100	17

PORCELAIN SOCKET CAPS

Two Screw Type


No. 150


No. 151


No. 175


No. 198

Cat. No.	Carton	Std. Pkg.	Wt.,Lbs. Std. Pkg.
	Pendant		
150	10	100	11
	⅛-Inch Brass		
151	10	100	13
	⅜-Inch Brass		
153	10	100	14
	½-Inch Brass		
191	10	100	20
	⅜-Inch Angle Brass		
175	10	100	19
	Pendant Cord Grip		
198	10	100	18

PORCELAIN CEILING RECEPTACLES

For 3¼-Inch and 4-Inch Outlet Boxes

660 WATTS, 250 VOLTS

Supporting screws in No. 3922 spaced 2¾ inches on centers. Supporting screws in No. 3923 spaced 3½ inches on centers.


Nos. 3922-3923

Cat. No.	Size Inches	Height	Outside Diameter	Carton	Std. Pkg.	Wt.,Lbs. Std. Pkg.
3922	3¼	1⅜	3 11/16	10	100	55
3923	4	1⅜	4 7/16	5	50	40

PORCELAIN RECEPTACLES

For 3¼ and 4-inch Boxes

250 WATTS, 250 VOLTS


No. 40262

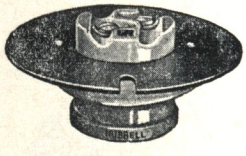
WITH FLUTED SHADE HOLDER RING

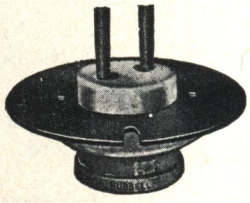
Cat. No.	Description	Box Inches	Carton	Std. Pkg.	Wt.,Lbs. Std. Pkg.
40262	Short Chain, 4 ft. Cord.	3¼	10	50	35
40462	Short Chain, 4 ft. Cord.	4	10	50	48

BOX RECEPTACLES

With Metal Cover and No. 14 Wires

660 WATTS, 600 VOLTS


No. 456


No. 458

For 3¼-Inch Outlet Boxes

Cat. No.	Description	Carton	Std. Pkg.	Wt.,Lbs. Std. Pkg.
456	Screw Terminals	10	100	49
458	6" Leads..	10	100	52

For 4-Inch Outlet Boxes

457	Screw Terminals	5	100	60
459	6" Leads	5	100	62

HUBBELL

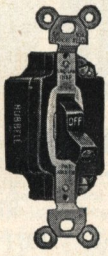
SPECIFICATION GRADE

FLUSH TOGGLE SWITCHES

Enclosed Bakelite Base

With Square Bakelite Handle

Cat. No.	Description	Amperes 125 V.T.	Amperes 250 V.	Carton	Std. Pkg.	Wt., Lbs., Std. Pkg.
9801	S.P., Ind.	10	5	10	50	12
9802	D.P., Ind.	10	10	10	10	3
9803	3-Way	10	5	10	20	7
9933	3-Way	20	10	10	10	4
9804	4-Way	5	2	10	10	3
9805	S.P., Ind.	20	10	10	20	8
9806	D.P., Ind.	20	10	10	10	4



No. 9801

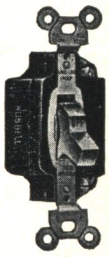
Will fit 1½-inch switch boxes.

Brown Bakelite handles are standard.

With Ivory Handle

Cat. No.	Description	Amperes 125 V.T.	Amperes 250-V.	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.
9801-I	S.P., Ind.	10	5	10	25	7
9802-I	D.P., Ind.	10	10	10	10	8
9803-I	3-Way	10	5	10	10	7
9933-I	3-Way Ind.	20	10	10	10	7
9804-I	4-Way	5	2	10	10	6
9805-I	S.P., Ind.	20	10	10	10	7

With Metal Handles



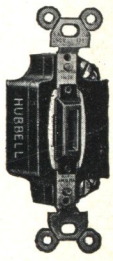
No. 7901

Cat. No.	Description	Amperes 125 V.T.	Amperes 250 V.	Carton	Std. Pkg.	Wt., Lbs., Std. Pkg.
7901	S.P., Ind.	10	5	10	50	13
7902	D.P., Ind.	10	10	10	10	3
7903	3-Way	10	5	10	20	6
9623	3-Way	20	10	10	10	4
7904	4-Way	5	2	10	10	4
7905	S.P., Ind.	20	10	10	20	8
7906	D.P., Ind.	20	10	10	10	3

Regularly supplied grounded. Standard finish is brush brass.

Locking Type with Enclosed Bakelite Base

One 8965 key furnished with each switch.



Cat. No.	Description	Amperes 125 V.T.	Amperes 250 V.	Carton	Std. Pkg.	Wt., Lbs., Std. Pkg.
9701	S. Pole	10	5	10	50	12
9702	D. Pole	10	10	10	10	3
9703	3-Way	10	5	10	20	6
9613	3-Way	20	10	10	10	3
9704	4-Way	5	2	10	10	3
9705	S. Pole	20	10	10	20	6
9706	D. Pole	20	10	10	10	3
1209	Key	—	—	20	100	2

HUBBELL

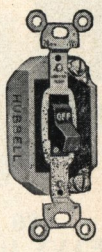
STANDARD GRADE

FLUSH TOGGLE SWITCHES

With Porcelain Base

With Brown Bakelite Handle

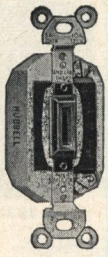
Cat. No.	Description	Amperes 125 V.T.	Amperes 250 V.	Carton	Std. Pkg.	Wt., Lbs., Std. Pkg.
8801	S.P., Ind.	10	5	10	100	34
8941	S.P., Ind.	20	20	10	50	19
8942	D.P., Ind.	—	20	10	20	9
8802	D.P., Ind.	10	10	10	50	19
8803	3-Way	10	5	10	50	19
8804	4-Way	5	2	10	10	4
8943	3-Way	20	10	2	10	5



No. 8801

Locking Type—With Porcelain Base

For Use with Standard Rectangular Opening Switch Plates



No. 8965

Has special locking feature which prevents unauthorized manipulation of the switch except by possessor of No. 8965 key.

One key furnished with each locking switch. Keyway finished in brown to match Bakelite.

Cat. No.	Description	Amperes 125-V.T.	Amperes 250-V.	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
8961	S. Pole, Locking	10	5	10	100	30
8962	D. Pole, Locking	10	10	10	50	19
8963	3-Way Locking	10	5	10	50	19
8964	4-Way, Locking	5	2	10	10	4
1209	Key	—	—	20	100	2

AC FLUSH TOGGLE SWITCHES

Cat. No.	Description	Std. Pkg.	Carton	Wt. Lbs. Std. Pkg.
	15 Amp.—120 Volts			
1201	S.P.—Brown	50	10	12
1201-I	S.P.—Ivorine	50	10	12
1202	D.P.—Brown	10	2	4
1202-I	D.P.—Ivorine	10	2	4
1203	3-Way—Brown	20	10	7
1203-I	3-Way—Ivorine	20	10	7
1204	4-Way—Brown	10	2	4
1204-I	4-Way—Ivorine	10	2	4
	15 Amp.—277 Volts			
1201	S.P.—Brown	50	10	12
1201-I	S.P.—Ivorine	50	10	12
1202	D.P.—Brown	10	2	4
1202-I	D.P.—Ivorine	10	2	4
1203	3-Way—Brown	20	10	7
1203-I	3-Way—Ivorine	20	10	7
1204	4-Way—Brown	10	2	4
1204-I	4-Way—Ivorine	10	2	4
	20 Amp.—120 Volts			
1221	S.P.—Brown	30	10	11
1221-I	S.P.—Ivorine	30	10	11
1222	D.P.—Brown	10	2	4
1222-I	D.P.—Ivorine	10	2	4
1223	3-Way—Brown	10	2	4
1223-I	3-Way—Ivorine	10	2	4
1224	4-Way—Brown	10	2	4
1224-I	4-Way—Ivorine	10	2	4
	20 Amp.—277 Volts			
1221	S.P.—Brown	30	10	11
1221-I	S.P.—Ivorine	30	10	11
1222	D.P.—Brown	10	2	4
1222-I	D.P.—Ivorine	10	2	4
1223	3-Way—Brown	10	2	4
1223-I	3-Way—Ivorine	10	2	4
1224	4-Way—Brown	10	2	4
1224-I	4-Way—Ivorine	10	2	4

AC FLUSH TOGGLE SWITCHES

Cat. No.	Description	Std. Pkg.	Carton	Wt. Lbs. Std. Pkg.
	15 Amp.—120 Volts			
1101	S.P.—Brown	100	10	18
1101-I	S.P.—Ivorine	50	10	9
1102	D.P.—Brown	10	2	10
1102-I	D.P.—Ivorine	10	2	10
1103	3-Way—Brown	50	10	9
1103-I	3-Way—Ivorine	30	10	5
1104	4-Way—Brown	10	2	2
1104-I	4-Way—Ivorine	10	2	2

HUBBELL WIRING DEVICES

IVORINE FLUSH TOGGLE SWITCHES

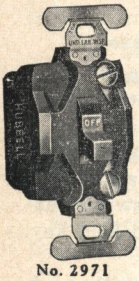


No. 8801-I

No. 8801 Line—with Porcelain Base and Square "Ivorine" Handle

Cat. No	Description	Amperes 125 V.T.	Amperes 250 V.	Std. Pkg.
8801-I	S.P. Switch, Ind.	10	5	50
8941-I	S.P. Switch, Ind.	20	20	10
8942-I	D.P. Ivorine	.....	20	10
8802-I	D.P. Switch, Ind.	10	10	25
8803-I	3-Way Switch.....	10	5	25
8943-I	3-way Ivorine..	20	10	10
8804-I	4-Way Switch.....	5	2	10

20 AMPERE AND 30 AMPERE HEAVY DUTY FLUSH TOGGLE SWITCHES



No. 2971



No. 2971-L

With Fully Enclosed Bakelite Base

Brown Bakelite handles are standard.

These switches accommodate regular switch plates, either single or in combination.

Length, 2¾"; Width, $1\frac{11}{16}$"; Depth, $1\frac{3}{32}$".

One key furnished with each locking switch.

20 AMPERES, 250 VOLTS

Cat. Nos. Std. Type	Cat. Nos. Lock Type	Description	125 V.T.	250 V.
2971	2971-L	Single Pole.....	20	20
2972	2972-L	Double Pole.....	20	20
2973	2973-L	Three-Way	20	20
2974	2974-L	Four-Way	20	10
		30 AMPERES, 250 VOLTS		
2923	2923-L	Single Pole.....	30	30
2924	2924-L	Double Pole.....	30	30
2925	2925-L	Three-Way	30	30
2926	2926-L	Four-Way	20	10
	2308	Key only.....		

PUSH BUTTON SWITCHES



No. 4401

With Porcelain Base

Std. Type	Description	Amperes 125-V.	Amperes 250-V.	Std. Pkg.	Wt.,Lbs. Std. Pkg.
4401	Single Pole	10	5	100	32
4402	Double Pole ..		10	50	19
4403	3-Way ...	10	5	50	18
4404	4-Way ...	5	2	10	5

INTERMEDIATE GRADE FLUSH TOGGLE SWITCHES

T-RATED—BAKELITE—WASHER EARS

Cat. No.	Description	Amperes 125-V.T.	Amperes 250-V.	Std. Pkg.
9641	Single Pole, Indicating..	10	5	100
9641-I	Single Pole, Ivorine	10	5	100
9643	3-Way	10	5	50
9643-I	3-Way, Ivorine	10	5	50



No. 9641

"SPHINX" MERCURY FLUSH SWITCHES

10 AMP., 125 VOLTS-V.T.
15 AMP., 120 VOLTS A.C.
5 AMP., 250 VOLTS



No. 9711

All Switches listed below except 9712 and 9712-I carry the above rating.

Cat. No.	Description	Carton	Std Pkg
9711	Single Pole, Brown Handle	10	100
*9712	Double Pole, Brown Handle	10	50
9713	Three-Way, Brown Handle	10	50
9714	Four-Way, Brown Handle	2	10
9711-I	Single-Pole, Ivorine Handle	10	50
*9712-I	Double-Pole, Ivorine Handle	10	30
9713-I	Three-Way, Ivorine Handle	10	30
9714-I	Four-Way, Ivorine Handle	2	10
9717-I	Single Pole, Lighted Handle	10	100
9718-I	3-Way, Lighted Handle ..	10	50



IMPORTANT: Switch must be mounted vertically. "Top" on one support indicates correct mounting position.

*No. 9712 and No. 9712-I rated at
10 AMP., 125 VOLTS
5 AMP., 250 VOLTS
5 AMPS., 125 VOLTS-V.T.

CEILING PULL SWITCHES

Diameter of base, 2½ inches. Mounting screws spaced $1\frac{31}{32}$ inches on centers. Supplied with 6 ft. of black cord.

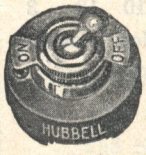


No. 7650-BC

Cat. No.	Description	Amperes 125V.	Amperes 250V.	Std. Pkg.
7650-BC	S.P. Slotted..	10	5	30
7652-BC	D.P. Slotted		10	10
7653-BC	3-Way Slot..	10	5	10
	With Outlet Box Covers			
5026-BC	S.P. 4"	10	5	30

APPLIANCE SWITCHES

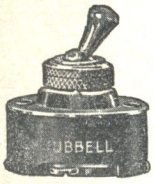
Center Hole Mounting



No. 8745

Diameter of neck ½"; Diameter Switch Base 1¼"; 6 Amp. Switch ¾"; 10 Amp. Switch $1\frac{3}{16}$".

Standard finishes are brush brass or polished nickel.



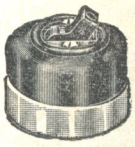
No. 8650

6 AMPERES, 125 VOLTS—3 AMPERES, 250 VOLTS

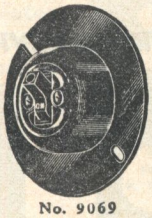
Cat. No.	Description	Carton	Std. Pkg.	Wt.,Lbs. Std.Pkg
8650	S.P., with 17/64" Neck	10	50	4
8656	S.P., with ½" Neck	10	50	5
8745	S.P., with 17/64" Neck, Ind.	10	50	4
8746	S.P., with ½" Neck, Ind.	10	50	6
	10 Amp., 250 Volts-15 Amp., 125 Volts			
8657	S.P., with 17/64" Neck	10	50	5
8658	S.P., with ½" Neck	10	50	4
8659	S.P., with 17/64" Neck, Ind.	10	50	4
8660	S.P., with ½" Neck, Ind.....	10	50	6

HUBBELL WIRING DEVICES

SURFACE TOGGLE SWITCHES



No. 9072



No. 9069

With Black Bakelite Covers and Handles

Cat. No.	Description	Amperes 125-V.	Amperes 250-V.	Diam. of Base Inches	Screw Hole Spacing	Wt.,Lbs. Std. Pkg.
9072	S.P., Slotted	6	3	2	1 7/16	22
9074	3-Way, Slotted	5	2	2 1/8	1 7/16	24

Standard package, 100; carton quantity, 10.

With Black Bakelite Covers—For Outlet Boxes

9068	S.P., 3¼" Boxes	6	3	3 7/16	2¾	25
9069	S.P., 4" Boxes	6	3	4 1/16	3½	27
9070	3-Way, 3¼" Boxes	5	2	3 7/16	2¾	22
9071	3-Way, 4" Boxes	5	2	4 1/16	3½	30

Standard package, 50; carton quantity, 5.

Steel outlet box covers finished to resist corrosion.

With Metal Handles

Brush brass is standard finish for brass covers.

Black porcelain base. Screw holes are elongated. Screw spacings, 1½ to 1 3/32 inches.

Outside diameter of base, 2¼ inches.



No. 8171

Cat. No.	Description	Amperes 125-V.	Amperes 250V.	Carton	Std. Pkg.	Wt.,Lbs. Std. Pkg.
8171	S.P., Solid	5	3	10	100	35
8191	S.P., Slotted	5	3	10	100	38
8421	S.P., Solid	10	5	10	100	37
8431	S.P., Slotted	10	5	10	100	37
8173	3-Way, Solid	5	3	10	100	36
8193	3-Way, Slotted	5	3	10	100	36

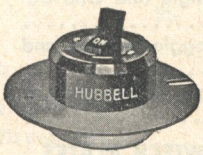


No. 4443

ACORN GRADE

With Bakelite Covers

5 AMPERES, 125 VOLTS
3 AMPERES, 250 VOLTS



No. 4431

Cat. No.	Description	Carton	Std. Pkg.	Wt.,Lbs Std.Pkg
4442	S.P., Slotted Base	10	50	10
4443	S.P., Solid Base	10	50	10
4444	3-Way, Slotted Base	10	50	10

Diameter of base, 2". Screw spacings 1⅜".

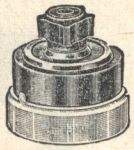
With Bakelite Covers—For Outlet Boxes

5 Amps., 125 V.—3 Amps., 250 V.

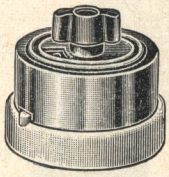
4431	S.P., 3¼" Box	10	50	20
4451	S.P., 4" Box	10	50	17
4453	3-Way, 4" Box	10	50	28

SURFACE SNAP SWITCHES

Black Bakelite Covers



No. 9512



No. 9527

Single Pole

6 AMPERES, 125 VOLTS—3 AMPERES, 250 VOLTS

Cat. No.	Description	Carton	Std. Pkg.	Wt.,Lbs Std. Pkg
9510	Single Pole, Slotted	10	100	22
9511	Single Pole, Slotted, Ind.	10	100	23
9512	Single Pole, Solid	10	100	23
9513	Single Pole, Solid, Ind.	10	100	23

Diameter of base, 2 inches. Screws spaced 1 13/32 in.

10 AMPERES, 125 VOLTS—5 AMPERES, 250 VOLTS

9515	Single Pole, Slotted, Ind.	10	100	39
9517	Single Pole, Solid, Ind.	10	100	39

Diameter of base, 2 15/32 inches. Screws spaced 1¾ in.

Three-Way

3 AMPERES, 125 VOLTS—1 AMPERE, 250 VOLTS

9330	3-Way, Slotted	10	100	25
9331	3-Way, Solid	10	100	25

Diameter of base 2⅛ inches. Screws spaced 1 7/16 inches.

Double Pole

5 AMPERES, 250 VOLTS

9521	Double Pole, Slotted, Ind.	10	100	35
9523	Double Pole, Solid, Ind.	10	100	35

Diameter of base 2⅛ inches. Screws spaced 1 7/16 inches.

10 AMPERES, 250 VOLTS

9525	Double Pole, Slotted, Ind.	10	100	42
9527	Double Pole, Solid, Ind.	10	100	42

Diameter of base 2 15/32 inches. Screws spaced 1¾ inches.

Four-Way

5 AMPERES, 125 VOLTS—2 AMPERES, 250 VOLTS

9540	4-Way, Slotted	10	30	12

Diameter of base 2½ inches. Screws spaced 1¾ inches.

SURFACE TOGGLE SWITCHES

Metal Handles

10 Amp. Double Pole and 3-Way

Brush brass and nickel plate are standard finishes for switch covers. Brush brass covers furnished unless otherwise specified.

Black porcelain base. Screw holes are elongated. Screw spacings. 1 3/32 to 1 25/32".

Outside diameter of base, 2⅝".

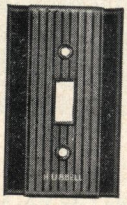


No. 8112

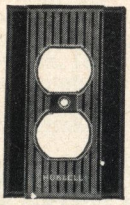
Cat. No.	Description	Amperes 125-V.	Amperes 250-V.	Carton	Std. Pkg.	Wt.,Lbs. Std. Pkg
8112	D.P., Solid		10	10	100	57
8162	D.P., Slotted		10	10	100	57
8153	3-Way, Solid	10	5	10	50	20
8233	3-Way, Slotted	10	5	10	50	28

UNILINE TRADE MARK BAKELITE PLATES

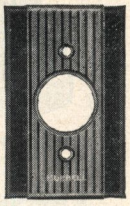
FOR STANDARD HUBBELL WIRING DEVICES



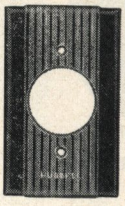
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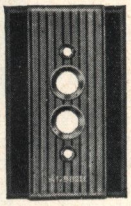
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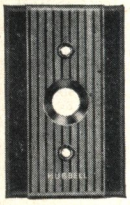
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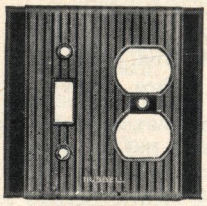
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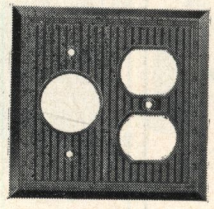
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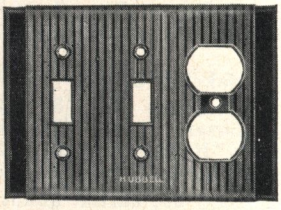
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No. 91532



No. 91572



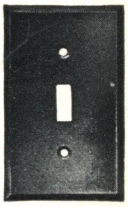
No. 91543

BROWN Cat. No.	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	TOGGLE SWITCH PLATES Description	IVORINE Cat. No.	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.
91071	50	100	10	One Gang for One Switch.....	**92071**	50	50	5
91072	10G	100G	10	Two Gang for Two Switches.....	**92072**	10G	50G	5
91073	10G	100G	10	Three Gang for Three Switches.....	**92073**	10G	50G	5
91074	10G	100G	10	Four Gang for Four Switches.....	**92074**	10G	50G	5
91075	10G	100G	7	Five Gang for Five Switches.....	**92075**	10G	50G	4
91076	10G	100G	7	Six Gang for Six Switches.....	**92076**	10G	50G	4
				CONVENIENCE OUTLET PLATES				
91101	50	100	10	One Gang for Duplex Convenience Outlet	**92101**	50	50	5
91102	5G	50G	9	Two Gang for Duplex Convenience Outlet	**92102**	5G	50G	9
91091	10	100	10	One Gang for Single Convenience Outlet	**92091**	10	50	5
91111	10	30	3	One Gang for No. 7438, 30 Ampere Convenience Outlet.....	**92111**	10	30	3
				COMBINATION PLATES				
91532	2	10	2	Two Gang for Toggle Switch and Duplex Convenience Outlet.....	**92532**	2	10	2
91512	2	10	2	Two Gang for One Toggle Switch and One Single Outlet.....	**92512**	2	10	2
91572	2	10	2	Two Gang for One Single and One Duplex Outlet.....	**92572**	2	10	2
91543	2	10	2	Three Gang for Two Toggle Switches and One Duplex Outlet.....	**92543**	2	10	2
91554	2	10	3	Four Gang for Three Toggle Switches and One Duplex Outlet.....	**92554**	2	10	3
				PUSH BUTTON SWITCH PLATES				
91081	10	100	9	One Gang for One Push Button Switch....	**92081**	10	50	5
				BLANK AND TELEPHONE PLATES				
91181	10	50	5	One Gang Telephone Plate, 19/32" Cord Hole	**92181**	10	30	3
91121	10	50	5	One Gang Blank Plate.....	**92121**	10	30	3
91122	10G	50G	5	Two Gang Blank Plate.....	**92122**	10G	30G	3

Brown Bakelite Plates are furnished as standard with Brown Plated Screws. Ivorine plates are furnished as standard with Ivorine enameled screws. Brown Bakelite and Ivory head screws may be furnished on order at slight additional charge.

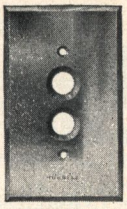
Blank Plates and Telephone Plates are furnished complete with the necessary mounting straps and screws.

HUBBELL BRASS PLATES



No. 94071
or
No. 96071

A standard package of these switch plates consists of 100 single plates or equivalent in gangs. Carton quantity is 10 gangs.



No. 94081
or
No. 96081

FOR SQUARE HANDLE TOGGLE SWITCHES

Struck-Up—.040-Inch Metal

Brush Brass Finish

Cat No	Description	Wt.,Lbs. Std. Pkg.
94071	Single Plate	19
94072	2-Gang Plate	16
94073	3-Gang Plate	14
94074	4-Gang Plate	13
94075	5-Gang Plate	12
94076	6-Gang Plate	10

Struck-Up—.060-Inch Metal

Brush Brass Finish

96071	Single Plate	26
96072	2-Gang Plate	22
96073	3-Gang Plate	25
96074	4-Gang Plate	23
96075	5-Gang Plate	22
96076	6-Gang Plate	20

FOR PUSH SWITCHES

Struck-Up—.040-Inch Metal

Brush Brass Finish

Cat. No.	Description	Wt.,Lbs Std. Pkg
94081	Single Plate	19
94082	2-Gang Plate	16
94083	3-Gang Plate	14

Struck-Up—.060-Inch Metal

Brush Brass Finish

96081	Single Plate	30
96082	2-Gang Plate	28
96083	3-Gang Plate	25

BLANK PLATES

Screw spacings 2⅜ inches on centers.

Struck-Up—.040-Inch Metal—Brush Brass

Cat. No.	Description	Dimensions Inches	Carton	Std. Pkg.	Wt.,Lbs Std. Pkg
94121	Single Plate	4½x2¾	10	50	10
94122	2-Gang Plate	4½x4 1/16	*	†	8
94123	3-Gang Plate	4½x6⅜	*	†	8

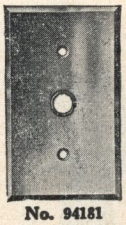
Struck-Up—.060-Inch Metal—Brush Brass

96121	Single Plate	4½x2¾	10	50	14
96122	2-Gang Plate	4½x4 1/16	*	†	12
96123	3-Gang Plate	4½x6⅜	*	†	10

†A standard package consists of 50 single plates or equivalent in gangs. * A carton quantity is 10 gangs.

SINGLE TELEPHONE OUTLET

Furnished with adapter to 3 3/32 inches.



No. 94181

Struck-Up—.040-Inch Metal

Brush Brass

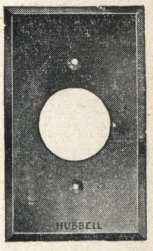
Single Cat. No.	Description	Weight
94181	Single Plate	10
94182	2-Gang Plate	7
94183	3-Gang Plate	7

Struck-Up—.060-Inch Metal

96181	Single Plate	14

A standard package consists of 50 single plates or equivalent in gangs. Carton quantity is 10 gangs.

PLATES FOR SINGLE CONVENIENCE OUTLETS



No. 94091
or
No. 96091

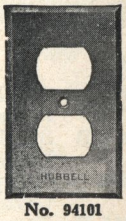
Struck-Up—.040-Inch Metal—Brush Brass

Cat. No.	Description	Dimensions Inches	Carton	Std. Pkg.	Wt.,Lbs. Std. Pkg.
94091	Single Plate	4½x2¾	10	100	17
94092	2-Gang Plate	4½x4 1/16	*	†	15
94093	3-Gang Plate	4½x6⅜	*	†	14

Struck-Up—.060-Inch Metal—Brush Brass

96091	Single Plate	4½x2¾	10	100	24
96092	2-Gang Plate	4½x4 1/16	*	†	20
96093	3-Gang Plate	4½x6⅜	*	†	20

PLATES FOR DUPLEX CONVENIENCE OUTLETS



No. 94101
or
No. 96101

Struck-Up—.040-Inch Metal—Brush Brass

Cat. No.	Description	Dimensions Inches	Carton	Std. Pkg.	Wt.,Lbs. Std. Pkg.
94101	Single Plate	4½x2¾	10	100	16
94102	2-Gang Plate	4½x4 1/16	*	†	14
94103	3-Gang Plate	4½x6⅜	*	†	14

Struck-Up—.060-Inch Metal—Brush Brass

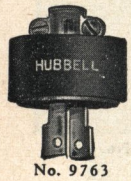
96101	Single Plate	4½x2¾	10	100	21
96102	2-Gang Plate	4½x4 1/16	*	†	8
96103	3-Gang Plate	4½x6⅜	*	†	15

†A standard package consists of 100 single plates or the equivalent in
*A carton quantity is 10 gangs.

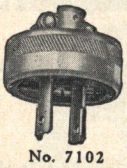
HUBBELL "TWIST-LOCK" DEVICES

2-WIRE "TWIST-LOCK" CAPS

20 AMPERES, 250 VOLTS



No. 9763


No. 7102


No. 7062

Rubber Cord Grip Caps

Cat. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
9763	.296" to .562" Cord Hole	10	30	5
*9764	.296" to .562" Cord Hole	10	30	5
9765	.406" to .625" Cord Hole	10	30	5
*9766	.406" to .625" Cord Hole	10	30	5
	Metal Covered Cord Grip Caps			
7102	.296" to .562" Cord Hole	10	30	5
*9102	.296" to .562" Cord Hole	10	30	5
7238	.406" to .625" Cord Hole	10	30	5
*9103	.406" to .625" Cord Hole	10	30	5
7228	Armored Angle Cap .500" to .625"	10	30	5
	Composition Caps Without Cord Grip			
7062	.406" Cord Hole	10	50	6
*7063	.406" Cord Hole	10	50	6

*Polarized—One wide and one narrow blade.

2-WIRE PLUG BASE

660 WATTS, 250 VOLTS

Cat. No.	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
7612	10	100	23


No. 7612

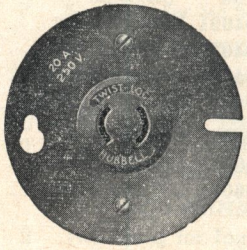
2-WIRE PORCELAIN FLUSH RECEPTACLES

Side and Back Wired

20 AMPERES, 250 VOLTS



No. 7210



Nos. 7216, 7217

Cat. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
7210	Single Receptacle, Black Porcelain	10	50	12
7210-B	Single Receptacle, Black Bakelite	10	50	10
7216	Receptacle with 3¼-Inch Cover, Porcelain	10	50	12
7216-B	Receptacle with 3¼-Inch Cover, Bakelite	10	50	13
7217	Receptacle with 4-Inch Cover, Porcelain	5	30	16
7217-B	Receptacle with 4-Inch Cover, Bakelite	5	30	15
7418	Cast Iron Plate with Lift Cover, fits "FS" and "FD" Boxes	10	30	12
7419	Cast Iron Plate without Lift Cover, fits "FS" and "FD" Boxes	10	30	15

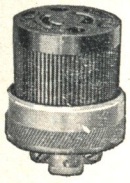
Metal covers finished to resist corrosion

Nos. 7210 and 7210-B may be used with polarized or non-polarized 20 ampere Twistlock caps. Fit standard convenience outlet plates.

2-WIRE CORD-GRIP CONNECTORS BLACK BAKELITE

20 AMPERES, 250 VOLTS

Bodies may be used with either polarized or non-polarized caps.


No. 7101

For .296 to .562 Inch Cables

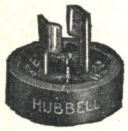
Cat. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
7101	Bakelite Body	10	30	7

For .406 to .625 Inch Cables

7224	Bakelite Body	10	30	8

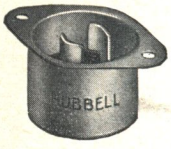
2-WIRE MOTOR PLUGS

20 AMPERES, 250 VOLTS



No. 7191

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.
7191	Surface Base, Male Composition	10	30	4
*9104	Surface Base, Male Composition, Polarized	10	30	3
8808	Flush Base, Male. (For Seal-Tite Rubber Plugs)	10	30	6
*9105	Flush Base, Male, Polarized	10	30	5
8815	Flush Base, Male, Exposed Wiring	10	30	6
*8816	Flush Base, Male, Exposed Wiring, Polarized	10	30	6
8817	Flush Base, Male, Exposed Wiring, with Round Flange	10	30	6
*8818	Flush Base, Male, Exposed Wiring, with Round Flange, Polarized	10	30	6
8809	Flush Base, Female	10	30	7



No. 8808

* Polarized—One wide and one narrow blade. Screw holes in Nos. 7191 and 9104 are spaced 1" on centers.

For No. 8 screws. Metal casings finished to resist corrosion.

2-WIRE PORCELAIN RECEPTACLE

20 AMPERES, 250 VOLTS

Screws $\frac{8}{32}$ inches. Diameter 1¾ inches, height 1 27/64 inches. Face 1½ inches.


No. 7624

Cat. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
*7624	Receptacle	10	50	13

* For Appleton Type "W" Unilet with No. 5681 Cover or Crouse Hinds No. "W" Series Condulets with No. "O" Steel Cover or No. O.G. Cast Cover.

3-WIRE CONDUIT BOX RECEPTACLES

20 AMPERES, 250 VOLTS

Designed for permanent grounding from one contact to conduit system.

Mounting screws ⅝-inch centers. Suitable for use with Crouse-Hinds "W" condulets and "O" cover, Appleton Electric Co. "W" unilets with No. 5680 cover, and Adalet Mfg. Co. fittings Nos. G2H, G3H and G4H.


No. 7329

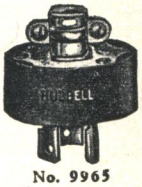
Cat. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
7329	Receptacle. Porcelain, Polarized, Black	10	30	10

HUBBELL "TWIST-LOCK" DEVICES

3-WIRE POLARIZED PLUG CAPS

20 AMPERES, 250 VOLTS AC OR DC—10 A., 600 VOLTS AC

Cord-Grip for .437" to .750" diameter cords.



No. 9965

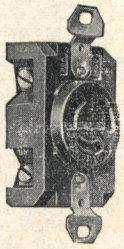


No. 7311

Cat. No.	Description	Carton	Std. Pkg.	Wt.,Lbs. Std. Pkg.
*7311	Composition, Armored	10	30	8
*9965	Rubber	10	30	8

3-WIRE FLUSH RECEPTACLES

20 Amp., 250 Volts, A.C. or D.C.—
10 Amps., 600 Volts, A.C.
For Side or Back Wiring



No. 7310

Cat. No.	Description	Carton	Std. Pkg.	Wt.,Lbs. Std.Pkg.
*7310	Porcelain	10	30	11
*7310-B	Bakelite	10	30	9
	With 4" Box Cover Attached			
*7517	Porcelain	5	20	12
*5717-B	Bakelite	5	20	10
†7502	Rectangular Brass Plate .060", for Two No. 7310	5	10	5
▲7418	Cast Iron Plate with Lift Cover	10	30	12
▲7419	Cast Iron Plate, less Lift Cover	10	30	15

†Requires 3-gang outlet box.

No. 7310 and 7310-B take standard single outlet plates.

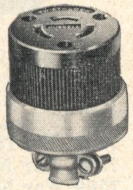
Steel box covers plated to resist corrosion.

▲ Fits "FS" and "FD" outlet boxes.

3-WIRE CONNECTOR BODY

20 AMPERES, 250 VOLTS, A.C. OR D.C.
10 AMPERES, 600 VOLTS, A.C.

Bakelite Cord-Grips accommodate .437" to .750" diameter cords.

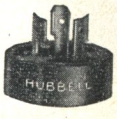


No. 7313

Cat. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
*7313	Bakelite Body	10	30	11

3-WIRE FLUSH MOTOR PLUGS

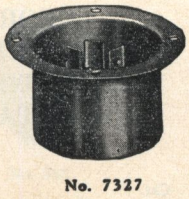
20 AMPERES, 250 VOLTS, A.C. OR D.C.
10 AMPERES, 600 VOLTS, A.C.



No. 7318

Screw holes in No. 7327 and 7328 spaced 120 degrees apart on 1¼" radius for No. 8 screws.

* For grounding information see footnote.



No. 7327

Cat. No.	Description	Carton	Std. Pkg.	Wt.,Lbs. Std. Pkg.
*7327	Base in Casing	10	30	10
*7318	Base, Composition	10	30	6
*7328	Flush Base, Female			

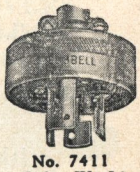
4-WIRE POLARIZED PLUG CAPS

20 AMP., 250 VOLTS AC OR DC
10 AMP., 600 VOLTS AC

Cord-Grip for .437" to .750" diameter cords.



No. 9967



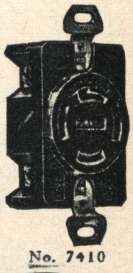
No. 7411

Cat. No.	Description	Carton	Std. Pkg.	Wt.,Lbs. Std. Pkg.
*7411	Composition, Armored	10	20	7
*9967	Rubber	10	20	6

4-WIRE FLUSH RECEPTACLES

20 Amp., 250 Volts, A.C. or D.C.—
10 Amps., 600 Volts, A.C.
Side or Back Wiring

Polarized



No. 7410

Cat. No.	Description	Carton	Std. Pkg.	Wt.,Lbs. Std.Pkg.
*††7410	Porcelain	10	20	8
*††7410B	Bakelite	10	20	7
	With 4" Steel Box Cover Attached			
*7417	Porcelain	5	15	10
*7417-B	Bakelite	5	15	10
**7421	Rectangular Single Plate, .060" Brass	10	20	4
†7422	Rectangular Brass Plate .060" for Two No. 7410	5	10	5



No. 7417

**Fits standard single outlet box.

†Requires 3-gang outlet box. Steel covers plated to resist corrosion.

††Nos. 7420, 7439, 91111 and 92111 plates fit these receptacles.

4-WIRE CONNECTOR BODY

20 AMPERES, 250 VOLTS, A.C. OR D.C.
10 AMPERES, 600 VOLTS, A.C.

Bakelite. Cord-Grips accommodate .437" to .750" diameter cords.

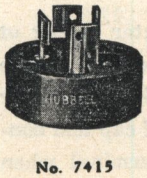


No. 7413

Cat. No.	Description	Carton	Std. Pkg.	Wt.,Lbs. Std. Pkg.
*7413	Bakelite Body	10	20	10

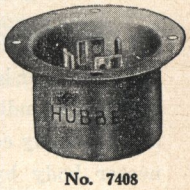
4-WIRE FLUSH MOTOR PLUGS

20 AMPERES, 250 VOLTS, A.C. OR D.C.
10 AMPERES, 600 VOLTS, A.C.



No. 7415

Diameter of casing flange, $3\frac{5}{16}$".
Diameter of casing base, $2\frac{15}{32}$".
Depth of casing, $1\frac{19}{32}$".
Four mounting screw holes are spaced $2\frac{29}{32}$" on centers, 90 degrees apart.



No. 7408

Cat. No.	Description	Carton	Std. Pkg.	Wt.,Lbs. Std. Pkg.
*7408	Base in Casing	10	20	9
*7415	Base, Composition	10	20	7
*7409	Base, Female, Bakelite	10	20	9

* If 3 or 4-wire "Twist-Lock" devices are desired with ground shunt from one contact to cover or casing, suffix letter "G" to catalog number.

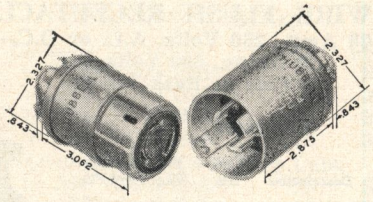
HUBBELL "TWIST-LOCK" DEVICES

5-in-ONE* "TWIST-LOCK"

3-WIRE AND 4-WIRE CONNECTORS

with Solderless Connectors and

Fully Adjustable Metal Cord Grips



50 Amp. 250 Volts D.C. 50 Amp. 600 Volts A.C.

*Will take cable sizes from 7/16". (.437) diam. to 1-1/16" in. (1.062) diam.

3-WIRE NOT GROUNDED

Cat. No.	Description	Carton	Std. Pkg.	Wgt. Lbs. Std. Pkg.
7760	Connector Body	2	5	7
7761	Male Cap	2	5	5

† 3-WIRE GROUNDED TO CASING

†7762	Connector Body	2	5	7
†7763	Male Cap	2	5	5

†† 4-WIRE WITH EQUIPMENT GROUND

††7764	Connector Body	2	5	7
††7765	Male Cap	2	5	5

† GROUNDING TO CASING: The long blade of cap and corresponding contact of connector body are electrically connected to the outer casing. The corresponding contact of the receptacle is electrically connected to the conduit system. If metallic covering of cable is used for the grounding circuit, connection to the casing is made thru the adjustable cord grips.

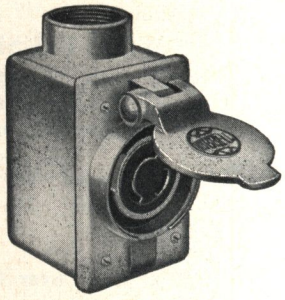
†† EQUIPMENT GROUND: The outer casing of cap connector body casing and receptacle casing serve as the grounding circuit. The grounding conductor is electrically connected to the casing of cap and connector body by means of a fourth terminal when using non-metallic covered cable. If metallic covering of cable is used for the grounding circuit, connection to the casing is made thru the adjustable cord grips. The receptacle casing is connected to the conduit system.

50 AMPERE, 3-WIRE "TWIST-LOCK" FLUSH RECEPTACLES AND PLATES, POLARIZED

With Solderless Connections

50 AMP. 250 VOLTS D. C., 50 AMP. 600 VOLTS A. C.

Cat.	Description	Carton	Std. Pkg.	Lbs. Wt. Std. Pkg.
7380	Flush Receptacle	5	2	3
†7381	Flush Receptacle, grounded—grounding terminal untapped—less screw and cap	5	2	6
7960	Flush Male Motor Base, 3-wire—not grounded ...	5	2	5
7961	Flush Male Motor Base, 3-wire—grounded to casing	5	2	5
7958	Flush Male Motor Base, 4-wire, with equipment ground	5	2	5
7382	Cast Iron Plate, with Lift Cover ..	5	2	7
7383	Cast Iron Plate, without Lift Cover ..	5	2	5



Nos. 7380, 7382
*Assembled to outlet box

Exposed metal parts finished to resist corrosion. Receptacle and Plate will fit FS and FD Boxes.
* Outlet box not supplied.
** The solderless wiring clamps can be swiveled so as to admit wire from end or bottom as shown.
† In accordance with Underwriters' standard for attachment plugs and receptacles the third terminal is not equipped wih a binding screw.

RUBBER COVERS FOR "TWIST-LOCK" CONNECTORS

2-Wire, 3-Wire and 4-Wire Sizes

Protection Against Breakage and Moisture

Recommended as Lock-Fast Connectors in Packing Plants, Fire Departments, Breweries, Distilleries, Mines, Bottling Plants, Dairies, Tunnels and for general Industrial requirements.

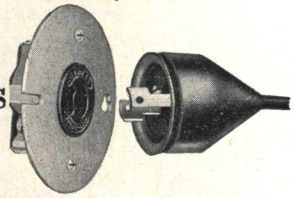


★**No. 7510** Assembled to No. 7102 Cap and No. 7101 Body.

Cat. No.	Description	Carton	Std. Pkg.	Wt.,Lbs Std. Pkg.
7510	For Nos. 7101 or 7102, 20A, 2-Wire	10	30	5
7530	For Nos. 7311 or 7313, 20A, 3-Wire	10	30	7
7569	For Nos. 7554 or 7555, 10A, 3-Wire	10	30	5
7435	For Nos. 7411 or 7413, 20A. 4-Wire	10	20	6
7470	For Midget "Twist Locks"	10	30	3

★**Catalog number covers one-half, and does not include Connector Cap or Wire. Two covers are required for each complete connector.**

RUBBER COVERS FOR "TWIST-LOCK" CAPS USED WITH FLUSH RECEPTACLES



★**No. 7511 Cover on No. 7102 Cap.**

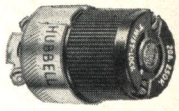
Cat. No.	Description	Carton	Std. Pkg.	Wt.,Lbs. Std. Pkg.
7511	For No. 7102, 2-Wire Cap.....	10	30	4
7531	For No. 7311, 3-Wire Cap.....	10	30	5½
7541	For No. 7411, 4-Wire Cap	10	20	4

★The No. 7511 type Rubber Cover is slightly shorter than those listed above for Cord Connectors, and is designed for use with "Twist-Lock" Flush Receptacles with steel box covers attached or with Standard Brass Flush Plates.

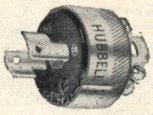
HUBBELL "TWIST-LOCK" DEVICES

2-WIRE "SUPER TWIST-LOCK"

20 Amp., 250 Volts



No. 3223



No. 3222

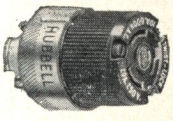
Screwless pressure grip terminals and 2-piece cap with dead front incorporated in an exclusive wiring design that insures utmost wiring security and saves electricians up to ⅓rd of their wiring time and labor. Cap and connector body are designed in two independent sections. Wire ends are pressure clamped between the two, thus assuring a positive, pull-proof connection. When secured in position the dead front "locks in" the strands.

Cat. No.	Description	Cord Grip Dia.	Pkg. Wgt. Lbs.
3221	20 A. 2-wire Armored Cap	.296-.625	5
3222	20 A. 2-wire Armored Cap Polarized	.296-.625	5
3223	20 A. 2-wire Armored Body	.296-.625	8

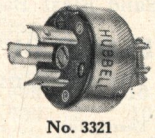
Carton 10; Standard Package 30

3-WIRE "SUPER TWIST-LOCK"

20 Amp., 250 Volts (A.C. or D.C.)
10 Amp., 600 Volts (A.C. only)



No. 3323



No. 3321

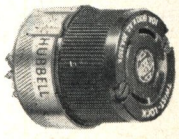
3321	20 A. 3-wire Armored Cap	.437-.750	7
3323	20 A. 3-wire Armored Body	.437-.750	8

Carton 10; Standard Package 30

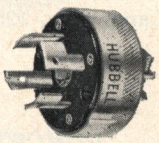
Suffix letter "G" for grounded devices.

4-WIRE "SUPER TWIST-LOCK"

20 Amp., 250 Volts (A.C. or D.C.)
10 Amp., 600 Volts (A.C. only)



No. 3423



No. 3421

3421	20 A. 4-wire Armored Cap	.437-.750	6
3423	20 A. 4-wire Armored Body	.437-.750	6

Carton 10; Standard Package 20

Suffix letter "G" for grounded devices.

"SEAL-TITE" RUBBER COVERS FOR 50 AMPERE "TWIST-LOCK" CAPS AND CONNECTOR BODIES



No. 7769



No. 7771

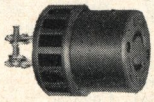
These rubber covers and protective closures are scientifically designed to protect "TWIST-LOCK" devices from atmospheric conditions, moisture, conductive dust, metal filings, etc. Rubber cover features a "bellows" action sealing the connected combination.

Cat. No.	Description	Std. Pkg. Wgt. Lbs.
7769	Short, "Seal-Tite" cover for 50 ampere "Twist-Lock" Connector Body (also used on cap, when used with 7380 receptacle.)	4
7770	Cast aluminum lift cover plate with rubber gasket.	7
7771	Long Seal-Tite rubber cover for 50 ampere "Twist-Lock" Male Cap (when used with cord connector body).	4
7773	Rubber gasket for weatherproofing 50 ampere male "Twist-Lock" Motor Bases.	1

Carton 2; Standard Package 5

2-WIRE "INSULPRENE TWIST-LOCK"

20 Amp., 250 Volts



No. 9768

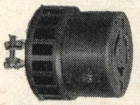
Molded from an exceptionally tough Neoprene composition which has excellent insulating properties and outdoor aging characteristics. "Insulprene" is prepared especially for Hubbell and is oil resistant, water resistant, and impact resistant. Units are safe, secure and long-lived and are designed to withstand rough industrial or commercial service.

9768	2-wire "Insulprene" Connector Body	8

Carton 10; Standard Package 30

3-WIRE "INSULPRENE TWIST-LOCK"

20 Amp., 250 Volt A.C. or D.C.
10 Amp., 600 Volt A.C. only



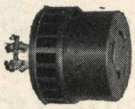
No. 9966

9966	3-Wire "Insulprene" Connector Body	11
9966G	3-Wire "Insulprene" Connector Body (Grounded)	11

Carton 10; Standard Package 30

4-WIRE "INSULPRENE TWIST-LOCK"

20 Amp., 250 Volts (A.C. or D.C.)
10 Amp., 600 Volts (A.C. only)



No. 9968

9968	4-Wire "Insulprene" Connector Body	10
9968G	4-Wire "Insulprene" Connector Body (Grounded)	10

Cord Grip Diameters .437-.750

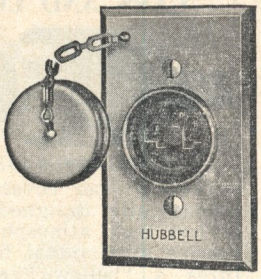
Carton 10; Standard Package 20

HUBBELL WIRING DEVICES

OUTDOOR FLUSH RECEPTACLES

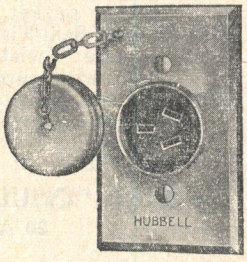
10 AMPERES. 250 VOLTS—15 AMPERES. 125 VOLTS

When not in use, the metal cap, suspended from plate, threads over the receptacle opening. When connected, the regular plug cap may be protected from the weather by the use of metal cover No. 7793, which screws to threaded ring on face plate. A rubber mat fitting under the plate completes the weatherproofing. Exposed metal parts are plated to resist corrosion.



No. 7792


No. 7793



No. 7794

Cat. No.	Description	Car. ton	Std. Pkg.	Wt. Lbs. Std. Pkg.
7792	Single, with .040" Plate, less No. 7793, Double T-Slots	2	10	6
7790	Single, with .060" Plate for "FS" Fittings, less No. 7793, Double T-Slots	2	10	7
7791	Duplex, with .060" Plate, less No. 7793, Parallel Slots	2	10	7
*7794	Single, 3-wire with .060" Plate, less No. 7793	2	10	7
7793	Metal Threaded Shield for covering a regular 2-wire or 3-wire cap	2	10	1

* No. 6149 3-wire cap should be used with No. 7794. Units are complete with Brass Plate, Metal Covers. Rubber Plates and Covers are finished to resist corrosion.

FAN HANGER OUTLETS

15 AMPERES. 125 VOLTS
10 AMPERES. 250 VOLTS

Cat. No.	Description	Car-ton	Std. Pkg.	Wt.,Lbs. Std. Pkg.
7710	With Yoke Support and B. B. Plate	10	20	14
7714	With Stud Support and B. B. Plate	10	20	13
7718	3 wire-yoke support with .060 B. Plate	10	20	19
7719	3 wire-stud support with .060 B. Plate	10	20	19



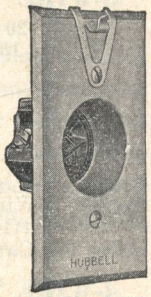
No. 7710

CLOCK HANGER OUTLETS

15 AMP., 125 VOLTS

This device allows the clock to hang flush with wall and cover outlet neatly.

Cat. No.	Description	Car-ton	Std. Pkg.	Wt.,Lbs. Std. Pkg.
7707	2-Wire, .040" Plate	2	10	5
7708	3-Wire, .040" Plate	2	10	4

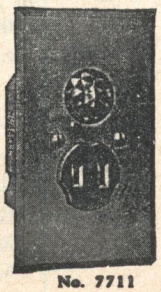


No. 7707

OUTLET AND PILOT LIGHT

10 AMP., 250 VOLTS—15 AMP., 125 VOLTS

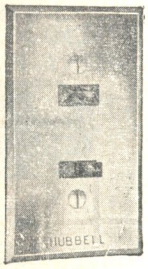
Cat. No.	Description	Car-ton	Std. Pkg.	Wt.,Lbs. Std. Pkg.
7711	With No. 7713 Plate	2	10	8
7728	With No. 7729 Plate	2	10	7


No. 7711

SWITCH AND PILOT LIGHT

S.P. and 3-Way—10 AMP., 125 V.—5 AMP., 250V.
D.P.—10 AMP., 250 V.

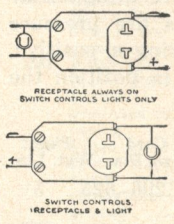
Cat. No.	Description	Car-ton	Std. Pkg	Wt.,Lbs. Std. Pkg.
7739	S.P. with .060" Plate	2	10	8
7759	S.P. with Orn. Bakelite Plate	2	10	7
7956	D.P. with .060" Plate	2	10	8
7957	D.P. with Orn. Bakelite Plate	2	10	12
7953	3-Way, .060" Plate	2	10	15
7954	3-Way, with Orn. Bakelite Plate	2	10	12



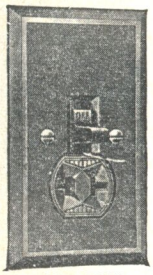
No. 7739

OUTLET AND SWITCH

WIRING DIAGRAMS



Operating handles and receptacle faces are of brown bakelite. Ratings given below are for switches only. Receptacle rating in all cases is 10 amperes, 250 volts; 15 amperes, 125 volts. Wiring diagrams above show method of installing to provide variation of control.


No. 8891

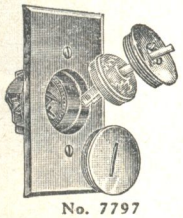
10 AMPERES. 250 VOLTS
10 AMPERES, 125 VOLTS T.

Cat. No.	Description	Car-ton	Std. Pkg.	Wt.,Lbs Std.Pkg
8885	S.P., with .060" Brass Plate	1	10	7
8886	S.P., without Plate	1	10	4
8891	S.P. with Bakelite Plate	1	10	5
8887	D.P., with .060" Brass Plate	1	10	7
8888	D.P., without Plate	1	10	4
8892	D.P., with Bakelite Plate	1	10	5
	Separate Plates			
8894	.060" Brush Brass Plate Only	2	10	4
8895	Sand Blast Bakelite Plate Only	2	10	3

FLOOR OUTLETS

15 AMPS., 125 VOLTS

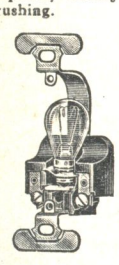
Cat. No.	Description	Car-ton	Std. Pkg.	Wt.,Lbs. Std.Pkg.
7797	Bevel Edge, .060" Plate	2	10	7
7798	Square Edge, Solid Plate	2	10	8


No. 7797

Two threaded solid brass covers are supplied—one for completely closing the outlet when not in use; the other, with cord hole and brushing.

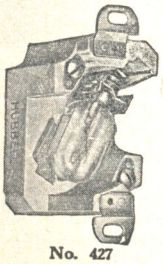
PILOT LAMP RECEPTACLES

Cat. No.	Description	Car-ton	Std. Pkg.	Wt.,Lbs. Std.Pkg.
	Candelabra Base			
432	Receptacle and 125 Volt Lamp	10	30	6
433	Lamp only, 125 V.	10	30	2


No. 432

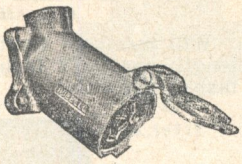
PORCELAIN PILOT LAMP RECEPTACLES

Cat. No.	Description	Car-ton	Std. Pkg.	Wt.,Lbs. Std.Pkg.
427	Receptacle with 2 C.P., 125-V Lamp	10	30	12


No. 427

"HUBBELLOCK" 30 AMP.—4-WIRE ANGLE WEATHER-PROOF RECEPTACLE

Tapped for 3/4" Conduit



Illustrating No. 21420 Angle Receptacle
30 A., 600 V., AC 20 A., 250 V., DC

Cat. No. Description

21420 Female Angle Weather-proof, with spring cover.

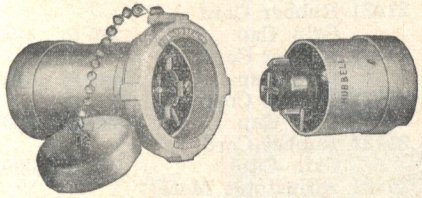
21447 Male Angle Weather-proof, with spring cover.

Std. Pkg. 10, Ctn. 2.

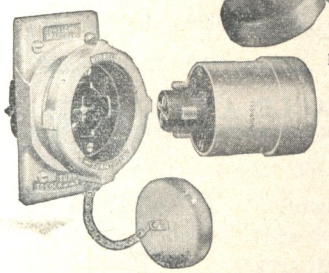
4-WIRE WEATHERTIGHT DEVICES

With Rubber Cord Grips

20 AMPERES, 250 VOLTS D.C.; 30 AMPERES 600 VOLTS, A.C.



Nos. 22414 and 22415 Assembled (1/5 actual size)



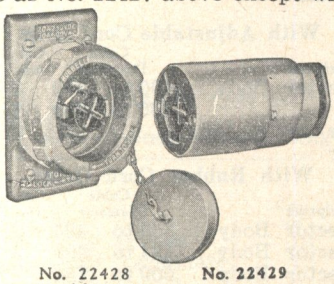
Nos. 22427 and 22415 Attached to Box. (1/5 actual size)

FEMALE RECEPTACLE CONNECTOR BODIES AND CAPS

Cat. No.	Description	Cable Diameter	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
22427	Female Recep., with Bronze Plate and Sealing Ring		2	10	24
22415	Cap	.360 to .484	2	10	7
22425	Cap	.484 to .609	2	10	9
22422	Cap	.609 to .750	2	10	12
22443	Cap	.750 to .875			
22419	Cap	.875 to 1.000	2	10	13
22414	Connector Body	.360 to .484	2	10	28
22424	Connector Body	.484 to .609	2	10	30
22426	Connector Body	.609 to .750	2	10	32
22441	Connector Body	.750 to .875			
22418	Connector Body	.875 to 1.000	2	10	31

MALE RECEPTACLE AND BODIES

Same type as No. 22427 above except with male contacts.



No. 22428 with cap

No. 22429

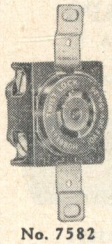
Cat. No.	Description	Cable Diameter
22428	With Cast Bronze Plate and Sealing Ring	
22429	Conn. Body for No. 22428	.360 to .484
22430	Conn. Body for No. 22428	.484 to .609
22431	Conn. Body for No. 22428	.609 to .750
22442	Conn. Body for No. 22428	.750 to .875
22432	Conn. Body for No. 22428	.875 to 1.000

Std. Pkg. 10, Ctn. 2. "Grounded" unless otherwise specified.

HUBBELL "TWIST-LOCK" DEVICES

10 AMP. 3-WIRE RECEPTACLES

10 Amps., 250 Volts 15 Amps., 125 Volts



No. 7582

Black Bakelite is standard for receptacles. Finished to resist corrosion.

No. 7582 fits any standard single flush Receptacle Plate.



No. 7583-7584

If desired grounded, suffix letter "G" to cat. no.

Cat. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg
7582	Bakelite Single Receptacle	10	50	9
7583	Bakelite Single Receptacle, 3¼"	10	30	11
7584	Bakelite Single Receptacle, 4"	5	30	13
7585	Bakelite Single Receptacle with short strap 1 13/16" centers	10	50	9
7586	Bakelite Single Receptacle with short strap 1¾" centers	10	50	9

DUPLEX FLUSH RECEPTACLES

10 Amperes, 250 Volts—15 Amperes, 125 Volts



No. 7580

No. 7580 takes any standard duplex receptacle flush plate.

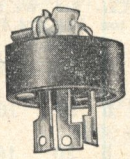
If desired grounded, suffix letter "G" to catalogue number.



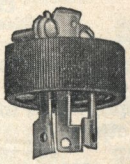
No. 7581

7580	Bakelite Duplex Receptacle	10	50	13
7581	Bakelite Duplex Recep., 4"	5	30	11

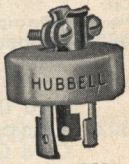
10 AMP. 3-WIRE POLARIZED CONN. & CAPS



No. 7567



No. 7554



No. 7572

10 Amps., 250 Volts — 15 Amps., 125 Volts

If desired grounded, suffix letter "G" to cat. no.

Cat. No.	Description	Cord Diameter	Carton	Std. Pkg.	Wt., Lbs. Std. Pks.
	Caps				
7567	Rubber	.296" to .562"	10	50	8
7568	Rubber	.406" to .625"	10	50	8
7554	Bakelite	.296" to .562"	10	50	6
7558	Bakelite	.406" to .625"	10	50	7
	Metal Covered Cap				
7572		296" to .562"	10	50	7
7573		.406" to .625"	10	50	8
	Bakelite Connector Bodies				
7555	Body	.296" to .562"	10	50	8
7559	Body	.406" to .625"	10	50	8

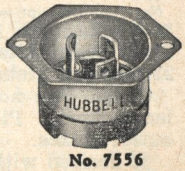


No. 7555

10 AMP. 3-WIRE PLUG BASES POLARIZED

10 Amps., 250 Volts 15 Amps., 125 Volts

	Motor Plug Bases in Casings			
7556	Bakelite, with Contact Blades	10	50	6
7557	Bakelite, Female Flush Base	10	50	7



No. 7556

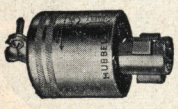
If desired grounded, suffix letter "G" to catalogue number.

"HUBBELLOCK"
POLARIZED CIRCUIT BREAKING DEVICES

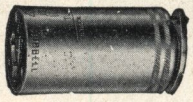
3-WIRE CONNECTORS AND CAPS

10 AMPERES, 250 VOLTS D. C.; 460 VOLTS A. C.
20 AMPERES, 125 VOLTS A. C. OR D. C.

WITH ADJUSTABLE CORD GRIPS



Regularly equipped with ½-inch sponge rubber discs located in neck of steel casings, and adjustable cord grips.



No. 23005 (¼ actual size) No. 23001

Cat. No.	Description	Cable Diameter	Carton	Std. Pkg.	Wt.,Lbs. Std. Pkg.
23002	Connector Body	.296 to .562	5	20	12
23005	Cap	.296 to .562	5	20	8
23003	Connector Body	.406 to .625	5	20	12
23006	Cap	.406 to .625	5	20	8

If desired with ground shunt from contact to cover or casing, suffix letter "G" to catalogue number.

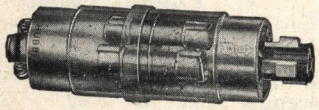
WITH RUBBER CORD GRIPS

Regularly equipped with ½-inch sponge rubber discs. located in neck of steel casings, and a specially designed dust-proof rubber cord-grip bushing.

Cat. No.	Description	Cable Diameter	Carton	Std. Pkg.	Wt.,Lbs. Std. Pkg.
23001	Connector Body	.484 to .609	5	20	12
23004	Cap	.484 to .609	5	20	8
23010	Connector Body	.360 to .484			
23011	Cap	.360 to .484			

If desired with ground shunt from contact to cover or casing, suffix letter "G" to catalogue number.

3-WIRE FUSIBLE CAPS



0-15 AMPERES, 250 VOLTS

Will receive 2 ferrule-type cartridge fuses. Fuse length overall 1⅛ inches, diameter 13/32 inch.

No. 23026 (¼ actual size)

Cat. No.	Description	Cable Diameter	Carton	Std. Pkg.	Wt.,Lbs. Std. Pkg.
23025	Rubber Cord Grip Cap	.484 to .609	5	20	16
23026	Adjustable Metal Cord Grip Cap	.296 to .562	5	20	16
23027	Adjustable Metal Cord Grip Cap	.406 to .625	5	20	16

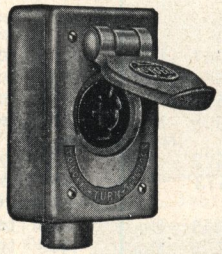
3-WIRE RECEPTACLE AND PLATE

10 AMPERES, 250 VOLTS D. C.; 460 VOLTS A. C.
20 AMPERES, 125 VOLTS A. C. OR D. C.



Steel covers finished to resist corrosion.

Receptacle and Plate will fit FS and FD Boxes.



No. 23000 (¼ actual size)

Nos. 23000-23007 *Assembled to Box

Cat. No.	Description	Cable Diameter	Carton	Std. Pkg.	Wt.,Lbs. Std. Pkg.
23000	Bakelite Receptacle		5	20	6
23007	Cast Metal Plate with Lift Cover		5	20	8
23008	Cast Metal Pl. without Lift Cov.		5	20	11

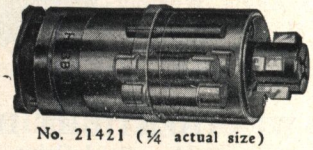
Outlet box not supplied. Fits any single convenience Outlet Plate. Also fits standard switch and outlet boxes.

If desired with ground shunt from contact to cover casing, suffix letter "G" to catalogue number.

4-WIRE FUSIBLE CAPS

0-30 AMPERES, 250 VOLTS

Will receive 3 ferrule-type cartridge fuses. Fuse length overall 2 inches, diameter 9/16 inch. Furnished less fuses.

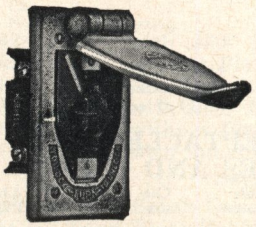


No. 21421 (¼ actual size)

Cat. No.	Description	Cable Diameter	Carton	Std. Pkg.	Wt.,Lbs. Std. Pkg
21421	Rubber Cord Grip Cap	.360 to .484	2	10	17
21431	Rubber Cord Grip Cap	.484 to .609	2	10	17
21432	Rubber Cord Grip Cap	.609 to .750	2	10	17
21422	Rubber Cord Grip Cap	.750 to 1.000	2	10	14
20421	Adjustable Metal Cord Grip Cap	.400 to .750	2	10	18

4-WIRE RECEPTACLE AND PLATES

20 AMPERES, 250 VOLTS D. C.; 30 AMPERES, 600 VOLTS A. C



Illustrations (¼ actual size)



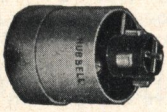
No. 20403 Receptacle with No. 20416 Plate. No. 20403

Cat. No.	Description	Cable Diameter	Carton	Std. Pkg.	Wt.,Lbs. Std. Pkg
20403	Bakelite Recep.		2	10	5
20416	Cast Metal Plate, with Cover		2	10	9
20417	Cast Metal Plate, without Cover		2	10	3

Receptacle and Plates will fit FS and FD Boxes

4-WIRE CONNECTORS AND CAPS

20 AMP., 250 V, D.C., 30 AMP., 600 V, A.C.



No. 20415



No. 20414

With Adjustable Cord Grip

Cat. No.	Description	Cable Diameter	Carton	Std. Pkg.	Wt.,Lbs. Std. Pkg
20414	Connector Body	.400 to .750	2	10	12
20415	Cap	.400 to .750	2	10	7
20424	Cover		2	10	4
20425	Cover		2	10	3

With Rubber Cord Grips

Cat. No.	Description	Cable Diameter	Carton	Std. Pkg.	Wt.,Lbs. Std. Pkg
21414	Connector Body	.360 to .484	2	10	10
21424	Connector Body	.484 to .609	2	10	11
21427	Connector Body	.609 to .750	2	10	16
21442	Connector Body	.750 to .875			
21418	Connector Body	.875 to 1.000	2	10	15
21415	Cap	.360 to .484	2	10	9
21425	Cap	.484 to .609	2	10	9
21426	Cap	.609 to .750	2	10	13
21443	Cap	.750 to .875			
21419	Cap	.875 to 1.000	2	10	9

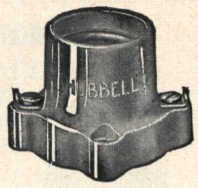
All 4-wire "Hubbellocks" are shipped "grounded" unless otherwise specified.

HUBBELL WIRING DEVICES

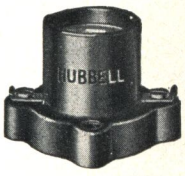
PORCELAIN CLEAT RECEPTACLES

660 WATTS, 250 VOLTS

Holes for screws 1 15/16-inch centers base. 2½x2⅜ inches.



No. 50715



No. 50715-B

Cat. No.	Description
50715	Porcelain
50715-B	Bakelite

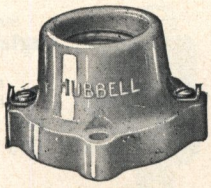
Carton 10; Standard Package 100.

Cleat Binding Screws

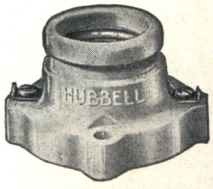
Holes for screws, 2⅜-inch centers.

9402 Base, 2 1/16x2-23/32 inches.

Carton 10; Std. Pge. 100.



No. 9402



No. 4013

With Shade Holder Groove

Holes for screws spaced 2⅜ inches on centers.

4013 Base, 2 1/16x2-23/32 inches.

Carton 10, Std. Pkg. 100.

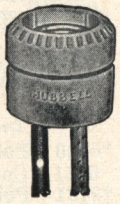
PORCELAIN SIGN RECEPTACLES

WITH GLAZED RINGS

660 WATTS, 250 VOLTS

With 3/16" Ring and 6" No. 14 Wires

Cat. No.	Carton	Std. Pkg.	Wt.,Lbs. Std. Pkg.
4003	10	100	28



No. 4003



No. 59108

Shallow type

With 3/16-Inch Glazed Ring



No. 4109

Cat. No.	Description	Carton	Std. Pkg.	Wt.,Lbs. Std. Pkg.
59108	With Binding Screws	10	100	21
4109	With Covered Terminals.....	10	100	29



No. 61988

Deep With ⅝-Inch Ring

BINDING SCREWS

Cat. No.	Carton	Std. Pkg.	Wt.,Lbs. Std. Pkg.
61988	10	100	23

ONE PIECE PORCELAIN SIGN RECEPTACLE

660 WATTS, 600 VOLTS

One-Piece



Nos. 4063

These receptacles require a hole 1⅜ inches in diameter. Holes for supporting screws are spaced 1 1/16 inches on the centers.

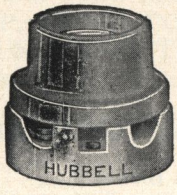
BINDING SCREWS

Cat. No.	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
4063	10	100	21

PORCELAIN RECEPTACLE

660 WATTS, 250 VOLTS

With Combination Base for Cleat or Concealed Wiring



No. 4229

Holes for screws elongated to provide 1⅜ to 1⅝-inch centers.

Base, 2⅛ inches.

Height of base, 1⅞ inches.

Cat. No.	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
4229	10	100	31

PIN TYPE BAKELITE WEATHERPROOF SOCKET

Rating, 660 Watts, 250 Volts



No. 7454

For use in temporary decorative lighting work. Not necessary to strip the wires when using this socket.

Contact screws are sharp-pointed. They puncture the insulation and make contact with the wire. Wires held rigidly in place by the socket cap, which is screwed down tight to the socket body, forming a firm and positive connection.

Cat. No.	Description	Carton	Std. Pkg.	Wgt. Lbs.
7454	Pin-type Bakelite socket	10	100	12

HUBBELL WIRING DEVICES

10 AMP. ATTACHMENT PLUG CAPS TANDEM BLADES

10 AMPERES, 250 VOLTS—15 AMPERES, 125 VOLTS

Black Bakelite—Heavy Duty

Cat. No.	Cord Hole Ins.	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
5420	.406	10	100	7


No. 5420

Brass Covered Composition—Heavy Duty

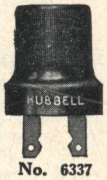
Standard finish is brush brass.

Cat. No.	Cord Hole Ins.	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
5523	.406	10	100	10


No. 5523

Elongated Composition—Black—Heavy Duty

Cat. No.	Cord Hole Ins.	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
6337	.500	10	100	15

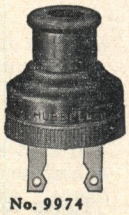

No. 6337

RUBBER FINGER GRIP CAPS

Tandem Blades

10 AMPS., 250 VOLTS—15 AMPS., 125 VOLTS

Cat. No.	Cord Hole Ins.	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
9974	.312 to .437	25	100	10
9936	.625	25	100	9


No. 9974

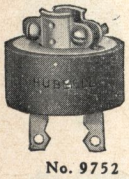
With Cord Grips—Tandem Blades

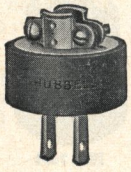
9942	.312 to .437	25	100	12
9939	.625	25	100	10

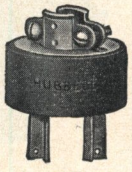

No. 9942

RUBBER "CORD-GRIP" CAPS

10 AMPERES, 250 VOLTS—15 AMPERES, 125 VOLTS

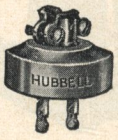

No. 9752


No. 9754

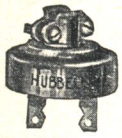

No. 9759

Cat. No.	Description	Cord Diameter	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
9752	Tandem Blade	.296 to .562	10	50	7
9753	Tandem Blade	.406 to .625	10	50	7
9754	Parallel Blade	.296 to .562	10	50	7
9755	Parallel, Polarized	.296 to .562	10	50	8
9756	Parallel Blade	.406 to .625	10	50	7
9757	Parallel, Polarized	.406 to .625	10	50	7
9759	Double T Blade	.296 to .562	10	50	8
9760	Double T Blade, Polz'd	.296 to .562	10	50	8

ARMORED "CORD-GRIP" CAPS


No. 7057

Special impact resisting composition cap, steel covered and plated.

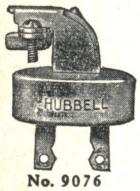

No. 7056

Cat. No.	Description	Cord Diameter	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg
7056	Tandem Blades	.296 to .562	10	50	7
7057	Parallel Blades	.296 to .562	10	50	7
*7059	Parallel, Polarized	.296 to .562	10	50	7
7183	Tandem Blades	.406 to .625	10	50	7
7184	Parallel Blades	.406 to .625	10	50	7
*7185	Parallel, Polarized	.406 to .625	10	50	7

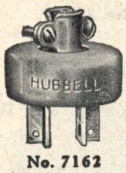
*One wide and one narrow blade.

Armored, Angle, "Cord-Grip" Caps

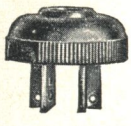
Cat. No	Descrip.	Cord Diameter	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
9076	Tandem	.500 to .625	10	50	8
9077	Parallel	.500 to .625	10	50	8


No. 9076

DOUBLE T BLADES CORD-GRIP


No. 7162

Blades are a combination of tandem and parallel riveted and key-locked together.


No. 7196

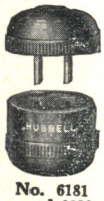
Cat. No.	Description	Cord Diameter	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg
7162	Armored	.296 to .562	10	30	5
7286	Armored, Polarized	.296 to .562	10	30	5
7196	Bakelite	.406	10	50	4

2-WIRE CORD CONNECTORS

Small Size with Parallel Slots Black Composition

10 AMPS., 250 VOLTS—15 AMPS., 125 VOLTS

Measures but 1⅝ inches over all.

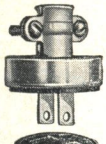

No. 6181 and 6630

Cat. No.	Description	Cord Hole Inches	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
*6630	Polarized Body	.406	10	50	5
6181	Cap, Comp	.406	10	50	5
†9181	Polarized Cap.	.406	10	50	3
7257	Body, Grip .406 to .625		10	50	8
7357	Cap, Grip .406 to .625		10	50	5
†9357	Polarized Cap, Cord Grip .406 to .625		10	50	8

*Takes either polarized or non-polarized caps.

† Polarized by providing a cap with one wide and one narrow blade which fits corresponding slots in body.

No. 6630 Bodies may be used with either polarized or non-polarized caps. Not interchangeable with other parallel blade type devices.

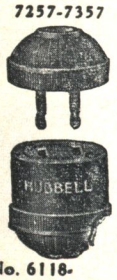

7257-7357

Standard Size with Parallel Slots Composition

10 AMPS., 250 VOLTS—15 AMPS., 125 VOLTS

Cat. No.	Description	Cord Hole Inches	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
6118	Body	.406	10	50	8
5964	Cap	.406	10	250	17

Cap fits double T slots.

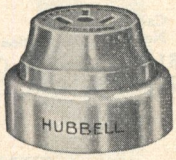

No. 6118

HUBBELL WIRING DEVICES

10 AMP. AND 20 AMP. 3-WIRE POLARIZED RECEPTACLES

Wall Type

Screw holes 1¾ inches on centers. Outside diameter of base, 2½ inches.



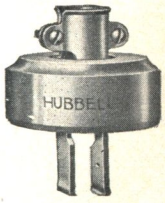
No. 6047

Cat. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
	10 AMPERES, 250 VOLTS 15 AMPERES, 125 VOLTS			
6047	Concealed	10	50	22
	20 AMPERES, 250 VOLTS			
5059	Concealed	10	30	14

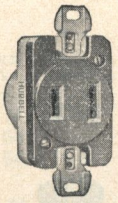
30 AMP. POLARIZED PORCELAIN FLUSH RECEPTACLE AND CAPS

Single Gang Size

30 AMPERES, 250 VOLTS



No. 7436



No. 7438

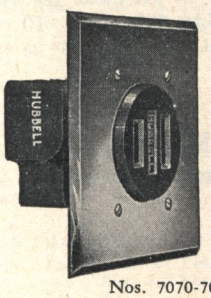
No. 7438 receptacle is 2½ inches high by 1 21/32 inches wide by 1⅞ inches deep, permitting its being installed in a single gang box. The face diameter of No. 7438 is larger than standard and requires the special plate No. 7439. The outside diameter of the cap is such that it will not fit when used in a two-gang installation of 7438 receptacles.

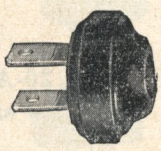
Cat. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
7436	C. G. Cap, .625 to 1.000 Hole..	5	30	18
7438	Comp. Face Porc. Receptacle	10	30	16
7439	.040" Brush Brass Plate.....	10	30	6

Two-Gang Size

30 AMPERES, 250 VOLTS

This receptacle is made throughout of a special black porcelain. Supporting lugs have mounting holes spaced to fit standard 2-Gang outlet boxes 2 inches deep or over.




Nos. 7070-7071-7072

Cat. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
7070	Black Porcelain Receptacle....	2	5	7
7071	Black Porcelain Cap, .718 Cord Hole	2	5	3
*7127	Metal Covered Cord Grip Cap	2	5	3
7072	.060" Brass Plate 4½" x 4⅛"	2	5	2

*Cord hole size, .625x1.000 inches.
Standard finish is Brush Brass.

3-WIRE POLARIZED RECEPTACLES

Conduit Box Type

Porcelain with Bakelite top. Height, 1½ inches. Diameter, 1½ inches.

10 AMPS., 250 VOLTS—15 AMPS., 125 VOLTS

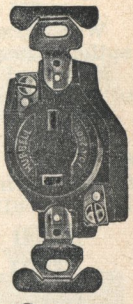


No. 1126

Cat. No.	Description	Carton	Std. Pkg.	Wt., lbs. Std. Pkg.
1126	Conduit Box Receptacle.....	10	50	11
1127	Conduit Box Receptacle, has Double Set Binding Screws	10	50	12

10-AMP. and 20-AMP. POLARIZED FLUSH RECEPTACLES

Will fit standard single convenience outlet plates.



10 AMPS., 250 VOLTS; 15 AMPS., 125 VOLTS

Cat. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
5566	Black Porcelain	10	30	11
5566-B	Black Bakelite.	10	30	7
5566-I	Ivorine	10	30	11
	20 AMPERES, 250 VOLTS			
5552	Black Porcelain	10	30	11
5552-B	Black Bakelite.	10	30	7
5552-I	Ivorine	10	30	11

With 3¼ and 4-Inch Round Steel Box Covers

*These receptacles will readily fit 3¼-inch outlet boxes when only one box connector is used. When two or more box connectors are needed the receptacles with 4-inch covers are required.

10 AMPERES, 50 VOLTS, 15 AMPERES, 125 VOLTS

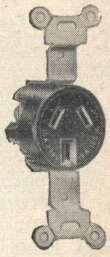
Cat. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
*7270	No. 5566 with 3¼-inch Cover	10	30	12
7271	No. 5566 with 4-inch Cover	5	30	15
	20 AMPERES, 250 VOLTS			
*7272	No. 5552 with 3¼-inch Cover	10	30	12
7273	No. 5552 with 4-inch Cover	5	30	14

10 AMP. 3-WIRE POLARIZED FLUSH RECEPTACLES

Composition and Porcelain

No. 6051 furnished in black bakelite. No. 7189 same design as No. 6051, but has ground shunt from one terminal to the back supporting strap. Take standard single outlet plates.

No. 9051 can be supplied grounded by suffixing letter "G" to catalogue number.


No. 6051

10 AMPS., 250 VOLTS—15 AMPS., 125 VOLTS

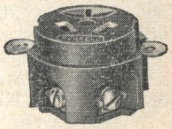
Cat. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
6051	Black Bakelite Recep.	10	50	9
6051-I	Ivorine	10	50	9
7189	Bakelite Grounded	10	50	9
7189-I	Ivorine, Grounded	10	50	9
9051	Porcelain Recep.	10	50	20

With 4-Inch Round Steel Box Covers Attached

7275	Bakelite on 4" Box Cover	5	50	15

Round Flush Type, Composition

Screw holes, 1¾ inches on centers, tapped for 8x21 screws. Fits in 1½ inch diameter hole.


No. 7214

10 AMPERES, 250 VOLTS—15 AMPERES, 125 VOLTS

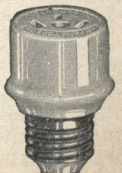
Cat. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
7214	Grounded. Two Binding Screws	10	30	6
7215	Not Grounded. Three Binding Screws	10	30	7

3-WIRE POLARIZED SEPARABLE ATTACHMENT PLUGS



No. 6149

Cat. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
	660 WATTS, 250 VOLTS			
6042	Porcelain Base..	10	50	13
	10 Amp., 250V. 15 Amp., 125V.			
6149	Bakelite Cap....	10	50	4


No. 6042

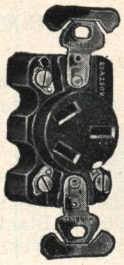
HUBBELL WIRING DEVICES

20 AMP. 3-WIRE POLARIZED FLUSH RECEPTACLE

Black Bakelite, Single
20 AMPERES, 250 VOLTS

Will fit standard single convenience outlet plates.

If desired Grounded suffix letter "G" to catalogue number.



No. 6810

Cat. No.		Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
6810		10	30	5
6810-I	Ivorine	10	30	5
7277	#6810 on 4" Box Cover			

10 AMP. 3-WIRE DUPLEX POLARIZED RECEPTACLES

Arranged for either back or side wiring—Polarized.

10 Amps., 250 Volts; 15 Amps., 125 Volts

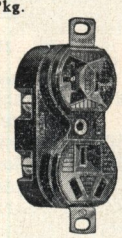


No. 7051

Cat. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
7051	Black Bakelite Receptacle	10	30	8
7051-I	Ivorine Receptacle	10	30	8
7208	Black Bakelite Receptacle with 4" Steel Box Cover	5	30	15

COMBINATION RECEPTACLES DOUBLE T-SLOTS and 3-WIRE

Each Outlet Rated: 10 A., 250 V.—15 A., 125 V.



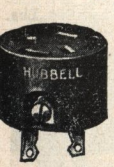
No. 7053

Cat. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
7053	Each outlet wired independently	10	30	8
7333	Like No. 7053, on 4" Cover	5	30	21
7054	Arranged with one feed and one return common to both outlets. 3 wire end permanently grounded to supporting strap	10	30	8
7334	Like No. 7054, on 4" Cover	5	30	21
7064	Arranged with one feed and one return common to both outlets. Grounding terminal 3-wire end equipped with binding screw	10	30	8
7335	Like No. 7064, on 4" Cover	5	30	21
7666	Black Bakelite, Independent feeds, end ground Terminal connected to strap	10	30	12
7667	Same as No. 7666 on 4" Box Cover	5	30	21

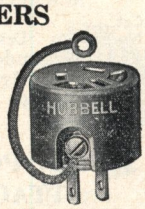
Fits Standard Duplex Receptacle Plates and Standard Switch Boxes.

2 to 3-WIRE PLUG ADAPTERS COMPOSITION

10 AMPERES, 250 VOLTS
15 AMPERES, 125 VOLTS



No. 7052



No. 9052-L

These adapters have two blades for insertion in any standard convenience outlet, while other end is equipped with three slots to take standard 10-ampere 3-wire caps as listed in opposite column.

Grounding of third blade is accomplished by the use of a binding post at the side of body which a wire is led to one of the flush plate screws of outlet or other grounding object.

Cat. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
★7052	Tandem Blades	10	30	5
★9052	Parallel Blades	10	30	6
7052-L	Tandem Blades, Gr. Wire	10	30	7
9052-L	Parallel Blades, Gr. Wire	10	30	7

10 AMP. and 20 AMP. 3-WIRE POLARIZED PLUG CAPS

10 AMPERES, 250 VOLTS
15 AMPERES, 125 VOLTS

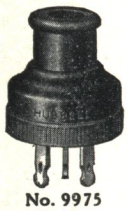


Nos. 6149, 7252

Cat. No.	Description	Cord Hole Inches	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg
6149	Bakelite Cap Black	.437	10	50	4
7252	Balekite Cap Black	.250	10	50	5

FINGER-GRIP CAP

10 AMPERES, 250 VOLTS
15 AMPERES, 125 VOLTS



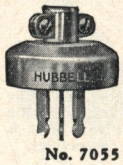
No. 9975

All Rubber

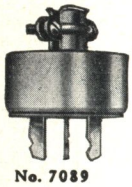
Cat.	Cord Hole Inches	Carton	Std. Pkg.	Wt., Lbs Std. Pkg.
9975	.312 to .468	10	50	6

"CORD-GRIP" TYPE

10 AMPERES, 250 VOLTS
15 AMPERES, 125 VOLTS



No. 7055



No. 7089

Cat. No.	Cord Diameter	Carton	Std. Pkg.	Wt., Lbs Std. Pkg
7055	.296 to .562	10	50	7
7309	.406 to .625	10	50	7
	20 AMPERES, 250 VOLTS			
7089	.406 to .625	10	20	5

If desired grounded, suffix letter "G" to catalogue number.

20-AMPERE CAPS

20 AMPERES, 250 VOLTS



No. 7198

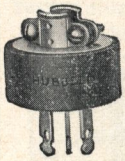
Cat. No.	Cord Hole Inches	Carton	Std. Pkg.	Wt., Lbs Std. Pkg
	Black Composition			
★7198	.625	10	30	5

If No. 6058 is desired grounded, suffix letter "G" to catalogue number

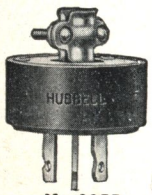
RUBBER "CORD-GRIP" PLUG CAPS

Polarized

10 AMPERES, 250 VOLTS
15 AMPERES, 125 VOLTS



No. 9750



No. 9977

Cat. No.	Cord Diameter	Carton	Std. Pkg.	Wt., Lbs Std. Pkg
9750	.296 to .562	10	50	8
9751	.406 to .625	10	50	8
	20 AMPERES, 250 VOLTS			
9977	.406 to .625	10	20	5

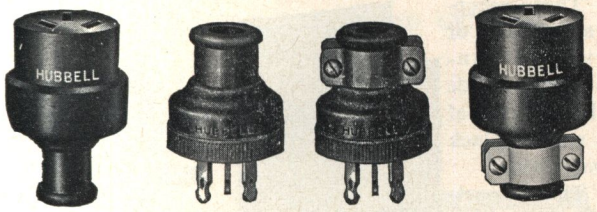
If desired grounded, suffix letter "G" to catalogue number.

HUBBELL WIRING DEVICES

10 AMP. RUBBER CORD CONNECTORS

10 AMPS., 250 VOLTS—15 AMPS., 125 VOLTS

Polarized



No. 9409 No. 9975 No. 9413 No. 9410

Roll-back handle section of body, easily detached and attached for wiring.
Self-Aligning Phosphor Bronze contact springs.
Brass contact blades securely riveted to specially designed brass inserts which are moulded solidly into rubber body of cap.

Without Cord Grip

Cat. No.	Description	Cord Hole Inches	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
9409	Body	.312 to .468	10	50	9
9411	Body	.625	10	50	8
9975	Cap	.312 to .468	10	50	6
9976	Cap	.625	10	50	6

With Cord Grip—Polarized

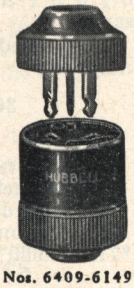
9410	Body	.312 to .468	10	50	10
9412	Body	.625	10	50	10
9413	Cap	.312 to .468	10	50	8
9414	Cap	.625	10	50	7

10 AND 20-AMP. 3-WIRE CORD CONNECTORS

Polarized

10 AMPERES, 250 VOLTS
15 AMPERES, 125 VOLTS

Cat. No.	Description	Cord Hole Inches	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
6409	Body	.437	10	50	12
6149	Cap	.437	10	50	4
7252	Cap	.250	10	50	5



Nos. 6409-6149

With Cord Grip

Composition. Caps are steel covered, cadmium plated. If desired grounded suffix letter "G" to catalogue number.
†Not available Grounded.

10 AMPS., 250 VOLTS—15 AMPS., 125 VOLTS

Cat. No.	Description	Cord Diam.	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
†7082	Body	.296 to .562	10	50	8
7055	Cap	.296 to .562	10	50	7
†7308	Body	.406 to .625	10	50	14
7309	Cap	.406 to .625	10	50	7

20 AMPERES, 250 VOLTS

†7088	Body	.406 to .625	10	20	9
7089	Cap	.406 to .625	10	20	5



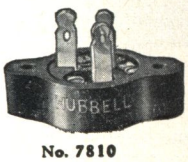
Nos. 7055-7082

3-WIRE MOTOR PLUGS

Polarized

10 AMPS., 250 VOLTS
15 AMPS., 125 VOLTS

Black Composition.



No. 7810



No. 7808

Cat. No.	Description	Cord Hole Inches	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
7810	Surface Base	.437	10	50	7
†7808	Flush Base	...	10	50	8

Nos. 7810 and 7808 take connector bodies Nos. 6409 and 7082 listed above.
*If desired grounded suffix letter "G" to catalogue number.

20 AMP. 4-WIRE BAKELITE FLUSH RECEPTACLES AND CORD-GRIP CAPS

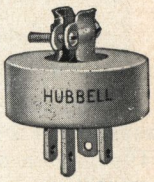
Polarized

20 AMP., 250 V.

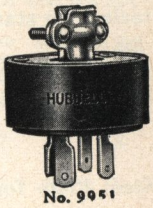


No. 7250

*Takes standard single outlet plates.
Gang plates to accommodate this receptacle must be of special size.
If No. 7250 is desired grounded suffix letter "G" to catalogue number.
No. 9251 has a shunt from the ground blade to the metal cover for grounding to metal-sheathed 3-wire cable.



No. 7251



No. 9951

The cord-grips will accommodate .437 to .750 inch diameter cord.

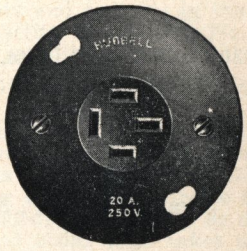
Cat. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg
*7250	Receptacle	10	20	8
7251	Cap, Metal Covered	10	20	6
9251	Grounded Cap, Metal Covered	10	20	5
9951	Rubber Cap	10	20	5

With 4-Inch Steel Box Covers

20 AMPERES, 250 VOLTS

If desired grounded add suffix "G" to catalogue number.

Cat. No.	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
7279	5	20	11



No. 7279

20 AMP. 4-WIRE CORD-GRIP CORD CONNECTORS

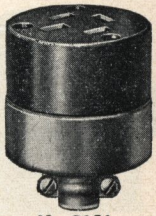
Polarized

20 AMPERES, 250 VOLTS

The Cord-Grip accommodates .437 to .750 diameter cords.

Cat. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
†7351	Body	10	20	9

†Not available Grounded.



No. 7351

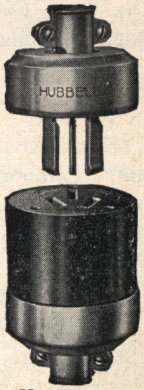
30 AMP. 3-WIRE CORD CONNECTOR, BASE AND CAP—BLACK

Polarized

30 AMPERES, 250 VOLTS

The adjustable Cord-Grip accommodates cords from .625 to 1.000 inch in diameter.

Cat. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
7283	Body	2	5	6
7113	Cap	2	5	4
7285	Male Base	2	5	4



No. 7283-7113

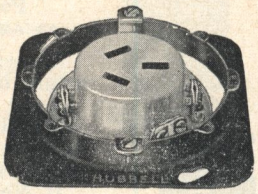
HUBBELL 50 AMP. 3-WIRE RECEPTACLES

With Plaster Box Covers

Polarized

50 AMPERES, 250 VOLTS

Fits standard box 4 1/8 inches square and 2 1/8 inches deep. The plaster box cover is of special construction to make possible the use of this receptacle with standard boxes.

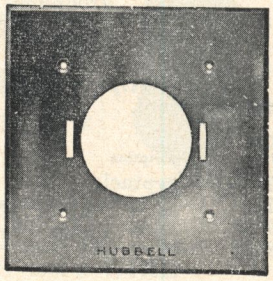


No. 9301 with Cover

Cat. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
9301	With Box Cover	2	10	17

Steel Plate for No. 9301 Flush Receptacle

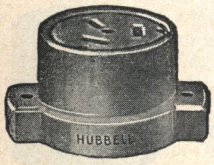
These plates are 5½ inches square to allow an overhang over the box to cover up irregularities in plaster work.



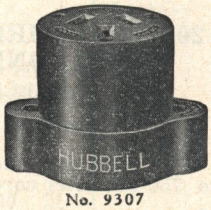
No. 9309

9309	.060" Steel Plate, Ground Slots and Springs	2	10	5

30 and 50 AMP. 3-WIRE RECEPTACLES



No. 9306



No. 9307

50 AMPERES, 250 VOLTS

Cat. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg
9306	Porcelain, Polarized	2	10	5

Composition, Polarized

30 AMPERES, 250 VOLTS

9307	Composition	2	10	10

3-WIRE BLACK COMPOSITION CAP

30 AMPERES, 250 VOLTS

No. Cat.	ton Car-	Pkg. Std.	Std. Pkg. Wt., Lbs.
9316	2	10	6

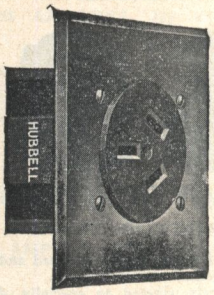
Cord Hole 0.750 inches.



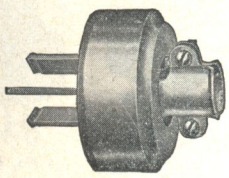
No. 9316

HUBBELL 30 AND 50 AMP. 3-WIRE PORCELAIN FLUSH RECEPTACLES. POLARIZED

These receptacles are of rugged construction, made throughout of a special black porcelain.



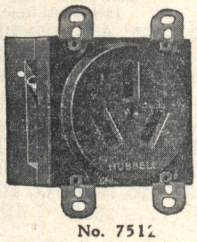
No. 7112



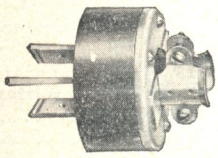
Nos. 7112-13-14

The supporting lugs have mounting holes spaced to fit a standard 2-gang box 2 inches deep or over as listed below.

No. 7113 has adjustable cord-grip accommodating cords from .625 to 1.000 inch in diameter. No. 7513 is similar to 7113 except that it is not completely covered and has soldering lugs instead of binding screws.



No. 7514



No. 7513

If desired grounded, suffix letter "G" to catalogue number.

30 Ampere—With Binding Screws

30 AMPERES, 250 VOLTS

Cat. No.	Description	Carton	Std. Pkg.	Wt., Lbs Std. Pkg
7112	Black Porcelain Receptacle	2	5	7
7113	Cord-Grip Cap	2	5	4
7514	Grounded Cord-Grip Cap	2	5	3
*7114	.060" Brass Plate	2	5	2

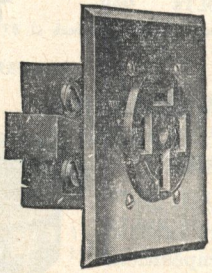
50 Ampere—With Soldering Terminals

50 AMPERES, 250 VOLTS

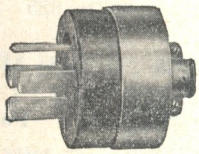
7512	Porcelain Receptacle	2	5	8
7513	Cord-Grip Cap	2	5	4
*7114	.060" Brass Plate	2	5	2

*No. 7114 is of standard 2-gang size, 4½x4 9/16 inches. Standard finish, brush brass.

60 AMP. 4-WIRE PORCELAIN FLUSH RECEPTACLES POLARIZED



No. 7301 and 7114



No. 7303

60 AMPERES, 250 VOLTS

Cat. No.	Description	Carton	Std. Pkg.	Wt., Lbs Std. Pkg
7301	Receptacle	2	5	9
7302	Angle Cap	2	5	9
7303	Straight Cap	2	5	8
*7114	.060" Brass Plate	2	5	2

HUBBELL WIRING DEVICES

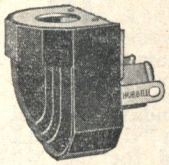
30 and 50 AMP. 3-WIRE SURFACE POWER RECEPTACLE

With Patented Pressure Type Terminals—Polarized

DESIGNED FOR RANGE AND GENERAL INSTALLATIONS



No. 7990



No. 7977



No. 7989

50 AMPERES—250 VOLTS

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.
7940	50 A., 250 V., surface type, metal covered	2	10	9
*7990	Surface Receptacle, Black Bakelite	2	10	15
†7977	Range Cap, Black Bakelite	2	10	10
7989	Ground Strap for No. 7990	2	10	1

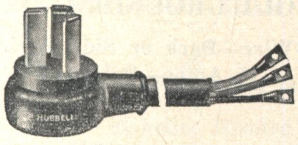
30 AMPERES—250 VOLTS

9390	Surface Receptacle, Black Bakelite "L" slots	5	20	22
9390-I	Surface Receptacle, Ivorine, "L" slots	5	20	22
9395	30 Amp, 250 V, surface type, metal covered	2	10	9

*When used with 1" conduits omit the clamps, and in its place use a regular conduit bushing and lock nuts.

†Fits #9301 Receptacle.

3-WIRE RANGE CORD SETS

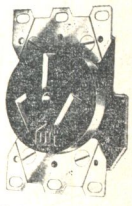


Nos. 7914, 7915

7914	36" Rubber Cord Set, 2 No. 6 and 1 No. 8 Wires	2	10	22
7915	36" Rubber Cord Set, 2 No. 8 and 1 No. 10 Wires	2	10	18

FLUSH TYPE POWER OUTLETS

Available in 30 and 50 Amp. sizes.



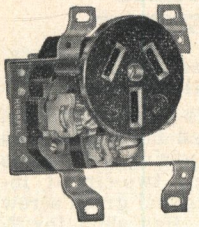
This outlet features shallow compact design, pressure plate back wiring, terminals recessed for extra safety, captive binding screws which cannot contact sides of box, cadmium plated terminals and 3-hole mounting plate. It accommodates up to No. 6 wire.

Cat. No.	Description	Ctn.	Std. Pkg.	Wt. Lbs. Std. Pkg.
7962	50 Amp. single receptacle	2	10	5
7962G	50 Amp. single receptacle	2	10	5
9350	30 Amp. single receptacle	2	10	5
9350G	30 Amp. single receptacle, grounded	2	10	5
9353	Single stainless steel plate	2	10	2
9354	2-gang single opening stainless steel plate	2	10	3
9356	2-gang single opening grounding plate, stainless steel	2	10	3

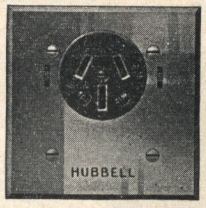
50 AMP. 3-WIRE POWER RECEPTACLE

***WITH PATENTED PRESSURE TYPE TERMINALS**

POLARIZED



No. 7974



No. 7975

No. 7974 with No. 7975

50 AMPERES—250 VOLTS

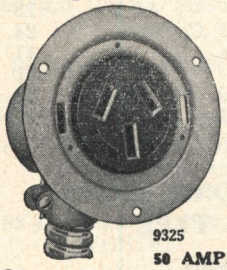
Cat. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
7974	Receptacle only	2	10	9
7975	.040" brush brass plate only with ground slots and contacts	2	10	3
7987	.040" brush brass plate only, less ground slots and contacts	2	10	3
7978	No. 7974 Receptacle complete with No. 7975 .040 Brush Brass Plate, having ground slots and contacts.	2	10	13
7988	No. 7974 Receptacle complete with No. 7987 .040 Brush Brass Plate, less ground slots and contacts.	2	10	10

Range outlet No. 7974 with one screw pressure type terminal, is designed for 4" or 4⅛" box and standard ¾" plaster cover. Requires no special attachment. Has grounding slots and contacts in the plate. Will accommodate Bakelite Range Cap No. 7977 or standard rubber cord sets listed below.

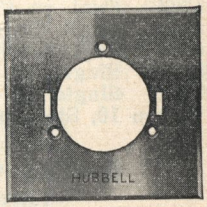
50 AMP. 3-WIRE POWER OUTLET POLARIZED

With Solderless Terminals 50 Amp. 250 Volts

This receptacle does not require a separate outlet box. It is designed to be mounted through a 3⅛" hole drilled in the wall. Receptacle body is of black bakelite. Regularly supplied with grounding slots through plate to accommodate caps with independent ground clips as on Nos. 7923, 7977, 7952, 9304 and 9305. Also takes all standard 50 ampere, 250 volt 3 wire caps without grounding clips.



9325



No. 9326

50 AMPERES—250 VOLTS

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.
9325	Bakelite Receptacle	2	10	14
9326	Stainless Steel Face Plate, Semi-polished finish	2	10	3
*9327	Steel Sub Plate	2	10	3

The angle cable grip clamp will accommodate BX, Greenfield or other metal sheathed cable, or non-metallic cable, measuring .750" to 1.187".

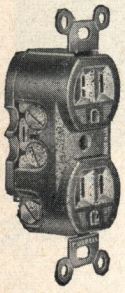
Maximum depth from underside of flange to bottom of cord clamp, largest cable in place, is 3½".

Supplied with three nickel plated wood screws. Specify No. 9325-G if desired with one contact grounded to metal casing.

*No. 9327 is equipped with an extra set of mounting holes. Is for use under the face plate where it may be necessary to cover up a carelessly cut hole in the plaster wall. Finished to resist corrosion.

HUBBELL WIRING DEVICES

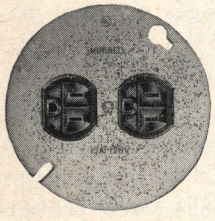
CONVENIENCE OUTLETS 3-WIRE, GROUNDING TYPE



No. 5262

For Grounding Exposed Metal Parts of Portable Electrical Equipment

This device has holes for back wiring, wire strip-gauge, and binding screws for conventional wiring. Contains break-off feature for two-circuit installations, and hexagonal green screw for grounding wire. Has slots for 2-wire regular and polarized caps, "U"-shaped slot for ground blade, and wire-looping slot. Washer type plaster ears. It is completely bakelite enclosed.



No. 5282

Polarized

Can be used with metallic or non-metallic wiring systems, is designed with two current carrying contacts and one grounding contact. The grounding contacts are electrically connected to supporting bridge and to hexagonal shaped green finished binding screw on side of receptacles for grounding wire.

Grounding of the metallic system wiring is directly through metal enclosure. Grounding of non-metallic systems is through a third wire acting as a grounding conductor. Will accommodate two armored or rubber caps.
The above receptacles will not take 3-wire caps other than those listed on this page and caps of similar design of other makes.

15 Amperes—125 Volts

Cat. No.	Description	Wt. Lbs. Std. Pkg.
5252	Duplex Outlet, Brown Bakelite	10
5252-I	Duplex Outlet, Ivorine	13
5262	Dupl., Brown Bakelite	13
5262-I	Dupl., Ivorine	13
5282	Dupl. on 4" Metal Box Cover	24
5261	Single, Brown Bakelite	11
5261-I	Single Ivorine	11
5271	Single, on 3¼" Metal Box Cover	20
5281	Single, on 4" Metal Box Cover	22

Carton 10, Standard Package 50

3-WIRE CORD CONNECTORS GROUNDING TYPE

Brown Bakelite
15 Amperes, 125 Volts



No. 5268



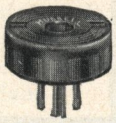
No. 5269 or 5270

Cat. No.	Description	Cord Diam.	Wt Lbs. Std. Pkg.
5268	Without Cord Grips	.437	8
5269	With Cord Grips	.296 to .562	10
5270	With Cord Grips	.406 to .625	10

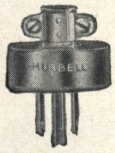
Carton 10, Std. Pkg. 50

3-WIRE CAPS, GROUNDING TYPE

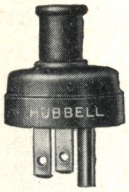
Polarized



No. 5263



No. 5264 or 5265



No. 5274 or 5275

In addition to standard parallel blades, these caps are also fitted with "U" shaped blade for grounding. They are designed for use with Grounding Type Convenience Outlets such as Nos. 5261 and 5262. Will also fit corresponding receptacles made by other manufacturers.

15 Amperes, 125 Volts

Cat. No.	Description	Cord Diam.	Wt. Lbs. Std. Pkg.
5263	Cap, Brown Bakelite	.437	5
5263-I	Cap, Ivorine	.437	5
5264	Armored Cap, Cord Grips	.296 to .562	6
5265	Armored Cap, Cord Grips	.406 to .625	8
5266	Rubber Cap, Cord Grips	.296 to .562	7
5267	Rubber Cap, Cord Grips	.406 to .625	7
5274	Rubber Fingergrip Cap	.312 to .468	6
5275	Rubber Fingergrip Cap	.625	6
5276	Rubber Fingergrip Cap, Cord Grips	.312 to .468	8
5277	Rubber Fingergrip Cap, Cord Grips	.625	8

Carton 10, Standard Package 50

The above caps were designed expressly for use with 15 ampere grounding type receptacles listed on this page.

250 VOLT GROUNDING DEVICES

3-Wire—Back or Side Wiring
15 Amps—Polarized



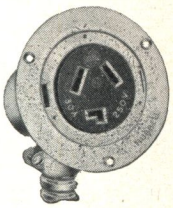
This new line of 3-wire Grounding Devices is similar in design to our present No. 5262 line of Grounding Devices except that it carries a rating of 15 amperes, 250 volts and has tandem slots in the receptacles and tandem blades in the caps.

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.
5661	Single Receptacle	10	50	11
5662	Duplex Receptacle, Brown Bakelite	10	50	12
5663	Cap, Brown Bakelite	10	50	4
5664	Armored Cap with cord grips, .296"-.625" cord hole	10	50	5
5669	Connector Body, .296"-.625" cord hole	10	50	10
5674	Rubber Cap, .312"-.468" cord hole	10	50	10
5676	Rubber Cap with cord grips, .312"-.468"	10	50	11
5678	Flush Motor Connector Base	10	50	6

HUBBELL WIRING DEVICES

30-AMPERE, 3-WIRE POWER OUTLET

Does Not Require a Separate Outlet Box



No. 9335

Designed to be mounted through a 3⅛" hole drilled in the wall. Receptacle body is black bakelite and has an (L) shaped slot designed to accept only 30 amp. caps with correspondingly shaped ground blade as No. 9337 and 9338 listed below. Supplied with three nickel plated wood screws. Angle cable clamp will accommodate BX, Greenfield or other metal sheathed cable, non-metallic cable measuring .750" to 1.187".

Specify No. 9336-G if desired with one contact grounded to metal casing.

Cat. No.	Description	Cord Diam.	Wt. Lbs. Std. Pkg.
9335	Bakelite Receptacle		13
9337	Armored Cord Grip, Ungrounded	.625 to .1000	6
9338	Armored Cord Grip, Grounded	.625 to .1000	6
9336	Stainless Stl. Fc. Pl. without slots, semi-polished finish		3
*9327	Steel Sub. Plate		3

Carton 2, Standard Package 10

* No. 9327 is equipped with an extra set of mounting holes. This plate is for use under the flange of steel housing where it may be necessary to cover up a carelessly cut hole in the plaster wall. Finished to resist corrosion.

SCREWS for HUBBELL FLUSH PLATES



No. 7169 Screw, 7170 Screwdriver (Special Equipment)



No. 7213



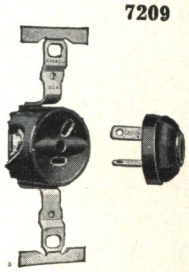
No. 7209

Brass screws (7341) to match bakelite are supplied on all bakelite plates, but bakelite headed screw No. 7213 may be had on special order at an advance in price.

Special ornamental head screws and special screwdriver will be supplied with standard package quantities of plates when so specified without extra charge, or may be purchased separately.

Cat. No.		Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.
	Non-Tamperable Brass Plate Screw			
7169		20	100	¼
	Special Screwdriver for No. 7169			
7170		2	5	¼
	Bakelite Headed Screws			
7213	Brown	20	100	½
7213-I	Ivory	20	100	½
	Standard Brass Plate Screws			
7341		20	100	½
	Locking Clamp and Screw			
7209		10	100	1

RADIO RECEPTACLE & CAPS



No. 4193 with No. 4190

Power Receptacles Rated at

15 Amperes; 125 Volts;

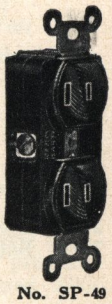
10 Amperes; 250 Volts

Cat. No.		Carton	Std. Pkg.	Wgt. Lbs.
4190	Radio Cap only .281" x .375" Cord Hole	2	10	½
4190-I	Ivorine Radio Cap Only .281" x .375" Cord Hole	2	10	½
4193	Radio Receptacle Only	2	10	1½
4193-I	Ivorine Radio Receptacle Only	2	10	1½

"SAFETY-PLUS" RECEPTACLE

Back or Side Wired

15 Amperes, 125 Volts



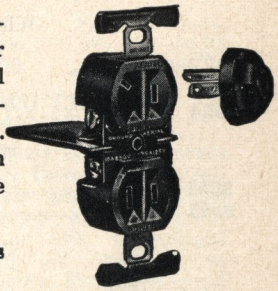
No. SP-49

The Safety-Plus Receptacle is built so that knife blades, pins, wires or other foreign objects inserted into the receptacle will not energize the unit. Unit contains four insulated rollers located within it so as to make contact only when standard or polarized caps are inserted. Takes standard parallel or polarized parallel caps.

Cat. No.	Description	Carton	Wt. Std.	Lbs. Pkg.
SP-49	Dupl. Safety Recptcle., Brown	10	100	23
SP-49-I	Dupl. Safety Recptcle., Ivorine	10	50	12
SP-49-4	Dupl. Safety Recptcle., Brown on 4" Steel box cover	5	5	25

DUPLEX RECEPTACLE WITH RADIO AND POWER CONNECTIONS

For Standard 1-Gang Boxes



No. 4188

No. 4189 s a single-gang duplex receptacle with a divider plate. One outlet is for aerial and ground, the other is for providing power for the radio. No. 4190 Radio Cap must be used in the radio outlet. Both receptacle and cap are of brown bakelite.

No. 4189 Receptacle takes Standard Duplex Plates.

Power Outlet Rated at 15 A., 125 V.; 10 A., 250 V.

Cat. No.		Carton	Std. Pkg.	Wgt Lbs
4188	No. 4189 Duplex Receptacle with Radio and Power Outlets, and No. 4190 Radio Cap.	2	10	4
4188-I	Same as No. 4188 except in IVORINE.	2	10	4
4189	Duplex Receptacle with Radio and Power Outlet only	2	10	3
4189-I	Same as No. 4189 except in IVORINE	2	10	3
4190	Radio Cap only .281" x .375" Card Hole	2	10	½
4190-I	Same as No. 4190 except in IVORINE	2	10	½

Safety: A metal divider is attached securely to the body of the radio outlet to separate the low and high tension circuits in the switch or outlet box. Polarity prongs of special cap prevent antenna and ground circuit from connection with power side of outlet. Circuit connections clearly indicated in the body of the outlet.

HUBBELL WIRING DEVICES

2-WIRE CORD CONNECTORS



No. 5574

Heavy Duty Size—Bakelite —with Double T Slots

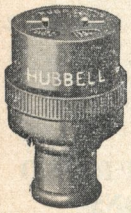
10 AMPS., 250 VOLTS
15 AMPS., 125 VOLTS

Cat. No.	Description	Cord Hole Inches	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
	Without Cord Grip				
5574	Body, Black	.406	10	50	6
7080	Body, Black	.312	10	50	8
	With Cord Grip				
	Caps are steel covered and plated.				
7084	Body	.296 to .562	10	50	8
7187	Body	.406 to .625	10	50	8



No. 7084

RUBBER CORD CONNECTORS



No. 9952

10 AMPS., 250 VOLTS
15 AMPS., 125 VOLTS

Roll-back handle section of body, easily detached and attached for wiring.

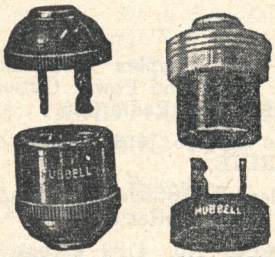
Self-Aligning Phosphor Bronze contact springs.



No. 9953

Cat. No.	Description	Cord Diam.	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
	Without Cord Grip				
9952	Body	.312 to .468	10	50	8
9954	Body	.625	10	50	8
	With Cord Grip				
9953	Body	.312 to .468	10	50	10
9955	Body	.625	10	50	10

10 AMP. and 20 AMP. 2-WIRE POLARIZED CONNECTORS



6822-6918

6278-6279

Standard Size—Polarized

10 AMPERES, 250 VOLTS—15 AMPERES, 125 VOLTS

Cat. No.	Description	Cord Hole Inches	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
6822	Body	.406	10	50	7
6918	Cap	.406	10	50	4

Large Size—Polarized—Brass Covered Porcelain Cap

10 AMPERES, 250 VOLTS—15 AMPERES, 125 VOLTS

6279	Motor Base	.406x.312	10	30	4

Diameter, base, $1\frac{9}{16}$"—Screw holes 1" on centers.

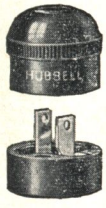
MOTOR ATTACHMENT PLUGS

Black Composition

10 AMPERES, 250 VOLTS
15 AMPERES, 125 VOLTS

Small Size

Cat. No.	Description	Cord Hole, Ins.	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
7021	Polarized Base	.406	10	50	3
7024	Base Non-Pol	.406	10	50	5
6630	Body	.406	10	50	5



7021-6630

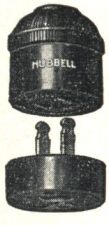
No. 7021 is furnished with one wide and one narrow blade to effect polarization. Diameter base, $1\frac{9}{32}$". Supporting screw holes .875" on centers.

Cord hole size of No. 6630 body, .406". No. 6630 body may be used with polarized or non-polarized bases.

Above Slots and Blades are Non-Standard.

Standard Size with Parallel Blades and Slots

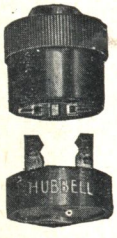
Cat. No.	Description	Cord Hole, Ins.	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
6118	Body, Black	.406	10	50	8
6823	Base	.406x.312	10	50	6



6118-6823

Heavy Duty—Double T Slots

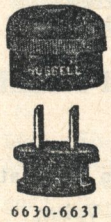
Cat. No.	Description	Cord Hole Inches	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.
5574	Body, Black	.406	10	50	6
7080	Body, Black	.312	10	50	8
5896	Base, Tandem	.406x.312	10	50	4



5574-5896

10 AMP. MOTOR ATTACHMENT PLUGS

10 AMPERES, 250 VOLTS—15 AMPERES, 125 VOLTS

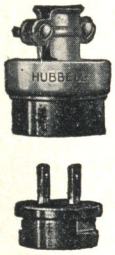


6630-6631

Small Size

Slots and Blades are Non-Standard

The bodies listed below may also be used with catalogue Nos. 6808 or 9808 motor plug bases.



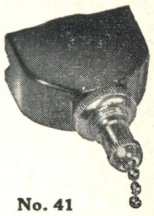
7257-6631

Cat. No.	Description	Cord Hole Inches	Carton	Std. Pkg.	Wt., Lbs Std. Pkg
6630	Body, Black Composition	.406	10	50	5
6979	Body, Black Composition	.312	10	50	5
6631	Base, less casing		10	50	3
	With Cord Grips				
7257	Body	.406 to .625	10	50	8
7259	Body	.296 to .406	10	50	7

McGILL ELECTRICAL SPECIALTIES

McGILL LEVOLIER SWITCHES
Approved by Underwriters' Laboratories, Inc.

LEVER OPERATED—SINGLE CIRCUIT
6 Amp. "T," 125 Volt—3 Amp., 250 Volt

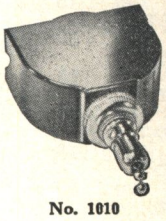

No. 41

Only 5/8 inch thick the No. 41 is one of the smallest 6 amp. 250 volt pull switches made, yet has unusual capacity, dependability and long life. Single pole, double break mechanism, equipped with 6 ft. cord or plain lever control. Standard finishes: brass, dark bronze, and burnished nickel.

Widely adaptable for canopy or conduit box mounting for individual control of incandescent or fluorescent lighting, F.H.P. motors, etc

Cat. No.	Stem, In. Diam.	Stem, In. Length	Carton	Std. Pkg.	Pkg. Wt.	Price Per 100
41	7/16	3/16	10	100	8	$100.00
42	7/16	3/8	10	100	8	106.00
43	7/16	3/4	10	100	8	106.00

LEVER OPERATED—SINGLE CIRCUIT
10 Amp. "T", 125 Volt—5 Amp., 250 Volt

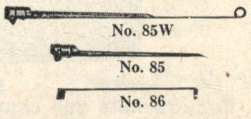

No. 1010

Smallest 10 Amp. pull switch made yet the No. 1010 has the ability to withstand the same loads as switches much larger in size. Single pole double break mechanism with 6 ft. cord and bell.

For individual control of high wattage lamps and fluorescent banks up to six 4-tube fixtures. Made with one-piece molded phenolic casing—easier to wire and install.

Cat. No.	Stem, In. Diam.	Stem, In. Length	Carton	Std. Pkg.	Pkg. Wt.	Price Per 100
1010	1/2	3/8	10	100	20	$180.00
1010L	1/2	5/8	10	100	20	180.00
1039 With mounting link			10	100	26	180.00

LEVOLIER EXTENSION ARMS



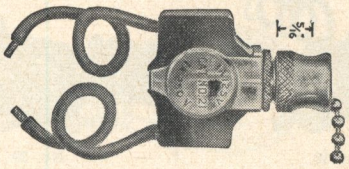
Prevent needless wear of cord, expense, fixture swaying and risk. The arm slips over the Levolier switch lever, cord is inserted through end hole and knotted to hold. No. 85-W can be extended for use with 18-22 in. and larger basin fixtures. Standard or special finished to match all Levolier switches.

Cat. No.	Overall Length Inches	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
85	5 1/4	10	100	3	$20.00
85-W	9	10	100	4	26.00
*86	5	10	100	2	16.00
*86-L	9	10	100	3	20.00

* For # 71 switch only.

McGILL LEVOLIER SWITCHES
Approved by Underwriters' Laboratories

PULL CHAIN—SINGLE CIRCUIT
3 Amp. "T," 125 Volt—1 Amp., 250 Volt



Especially durable, yet inexpensive switch with single pole, double break mechanism in plastic case. 6 in. wire leads secured to terminals by pressure connections—no soldered terminals. Equipped with 6 ft. cord and bell. Size 1 x 1 1/4 inches.

Cat. No.	Stem, Inches Diam.	Stem, Inches Length	Carton	Std. Pkg.	Pkg. Wt.	Price Per 100
21	15/32	1/8	10	100	7	$72.00

LEVER OPERATED—SINGLE CIRCUIT
Approved by Underwriters' Laboratories, Inc.
6 Amp. "T," 125 Volt—3 Amp., 250 Volt

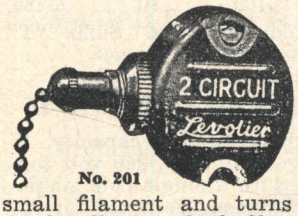


The No. 71 is the thinnest 6 Amp., 250 Volt "T" rated switch made — only 15/32 inch thick. Plastic cased with 6-inch wire leads, it is built with the famous Levolier mechanism for dependability and long life. Size 15/32 x 1 3/32 inches.

Ideal for small, and especially thin sectional fixture canopies.

Cat. No.	Stem, Inches Diam.	Stem, Inches Length	Carton	Std. Pkg.	Pkg. Wt.	Price Per 100
71	15/32	3/32	10	100	8 1/2	$96.00

LEVER OPERATED—TWO CIRCUIT
3 Amp., 125 Volt—1 Amp., 250 Volt

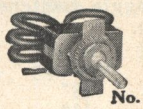


No. 201

Designed to operate with three-light lamps. When installed in the canopy of a fixture using the three-light lamp, it operates as follows: First pull turns on smaller filament, second pull turns off small filament and turns on the larger filament, third pull turns both filaments on and fourth turns both off. Standard finishes, brass, dark bronze and burnished nickel. Size 7/8 x 1 5/8 inches.

Cat. No.	Stem, In. Diam.	Stem, In. Length	Carton	Std. Pkg.	Pkg. Wt.	Price Per 100
201	7/16	3/16	10	100	11	$114.00
202	7/16	3/8	10	100	11	118.00
203	7/16	3/4	10	100	12	118.00

SINGLE CIRCUIT—TWO CIRCUIT—THREE WAY
6 Amp., 125 Volt—3 Amp., 250 Volt


No. 25

Practical but small plastic cased toggle switches with wire leads or soldering lugs. Dust and vibration proof with single pole, double break mechanism. Size 1/2 x 1/2 x 1 inch. Furnished also with colored plastic levers if ordered.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.	Price Per 100
25	Single Circuit, Wire Leads...	10	100	6	$66.00
25-L	Single Circuit, w/sold. Lugs..	10	100	5	66.00
25-T	Same w/terminals	10	100	5	74.00
27	Three-Way, Wire Leads.....	10	100	6	82.00
28	Two Circuit, Wire Leads....	10	100	6	102.00

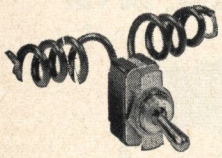
All stem diameters 15/32", length 1/4".

McGILL LEVOLIER SWITCHES

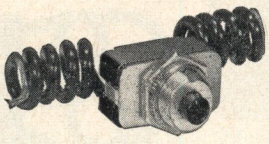
Approved by Underwriters' Laboratories, Inc.

TOGGLE—SINGLE AND TWO CIRCUIT

6 amp. 125 volts; 3 amp. 250 volts



No. 10



No. 29

No. 10 is a premium-quality toggle switch with lever action operating in line with the switch body. Single circuit (S.P.S.T.) with wire leads. 6 Amp. 125 volts, 3 amp. 250 volts. No. 12 is similar to No. 10 except it is a two-circuit type for controlling either of two circuits. No off position. 6 amp. 125 volt (S.P.S.T.)

Cat. No.	Stem Diameter	Length	Std. Pkg.	Carton	Std. Pkg. Weight
10	15/32"	1/4"	100	10	6 lbs.
10-L	15/32"	1/4"	100	10	5 lbs.
10-T	15/32"	1/4"	100	10	5 lbs.
12	15/32"	1/4"	100	10	6 lbs.

MOMENTARY CONTACT SWITCH

.75 Amp. 125 Volt

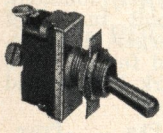
No. 29	15/32"	9/32"	100	10	5½ lbs.

Can be furnished with soldering lugs or terminals.

Cat. No.	Stem Diameter	Length	Std. Pkg.	Carton	Std. Pkg. Weight
13	15/32"	1/4"	100	10	6 lbs.
13-L	15/32"	1/4"	100	10	5 lbs.
13-T	15/32"	1/4"	100	10	5 lbs.
14	15/32"	1/4"	100	10	6 lbs.
14-L	15/32"	1/4"	100	10	5 lbs.
14-T	15/32"	1/4"	100	10	5 lbs.

Suffix "L" indicates soldering lugs. Suffix "T" indicates terminals.

SINGLE AND 2 CIRCUIT TOGGLE SWITCH



No. 90

No. 90 is a ¾ H.P. capacity, 15 amp. 125 volt, 10 amp. 250 volt toggle switch with a single-pole single-throw mechanism. Designed for AC operation. Heavy silver button contacts, 15/32"-32 threaded nipple, 7/16" long. Furnished with screw terminals, solder lugs or new spade terminals. Nickel finish with molded phenolic case.

No. 91—single-pole double-throw mechanism, center off.

No. 92—single-pole double-throw mechanism with no off.

All are Underwriters' Laboratories, Inc. inspected.

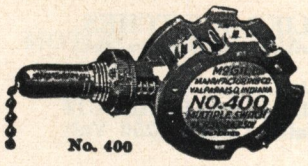
Toggle Switches 15 amp. 125 volts; 10 amp. 250 volts.

Cat. No.	Stem Diameter	Length	Std. Pkg.	Carton	Std. Pkg. Weight
90	15/32"	7/16"	100	10	10 lbs.
90-L	15/32"	7/16"	100	10	9 lbs.
90-S	15/32"	7/16"	100	10	9 lbs.
91	15/32"	7/16"	100	10	10 lbs.
91-L	15/32"	7/16"	100	10	9 lbs.
91-S	15/32"	7/16"	100	10	9 lbs.
92	15/32"	7/16"	100	10	10 lbs.
92-L	15/32"	7/16"	100	10	9 lbs.
92-S	15/32"	7/16"	100	10	9 lbs.

Standard models equipped with screw terminals. Suffix "L" indicates soldering lugs. Suffix "S" indicates spade terminals to fit AMP 41202.

McGILL LEVOLIER SPECIAL USE SWITCHES

For Multiple Circuits



No. 400

McGill builds many Special Use switches for all types circuits, using interchangeable components. Small in size. Rated from 4—10 amps. 250 volt. Recommended for fans, circulators and small motors.

Cat. No.	Stem. Ins. Dia.	Stem. Ins. Length	Amperes 125V	Amperes 250V	Std. Pkg.	Pkg. Wt.	Price Per 100
			1-2-off, D.P.D.T.				
206	½	3/8	6	3	100	15	$212.00
			1-off-2-off, D.P.D.T.				
265	½	3/8	6	3	100	15	192.00
			1-2-off, D.P.D.T.				
266	½	3/8	6	3	100	15	214.00
			1-off-2-off, S.P.D.T.				
272	½	3/8	10	5	100	15	186.00
			1-off-2-off, D.P.D.T.				
275	7/16	3/8	6	3	100	15	186.00
			off-on, D.P.S.T.				
276	½	3/8	6	3	100	15	186.00
			1-off-2-off, D.P.D.T.				
282	½	3/8	6	3	100	15	206.00
			1-2-3-off, S.P.				
400	7/16	3/8	4	2	100	12	138.00
			1-off-2-off, S.P.				
402	7/16	3/8	4	2	100	12	128.00
			1-2-3-4-no off, S.P.				
404	7/16	3/8	4	2	100	13	140.00
			1-2-3-4-5-no off, S.P.				
405	½	3/8	4	2	100	15	190.00
			1-2-off, S.P.				
406	7/16	3/8	4	2	100	13	130.00
			1-2-off, D.P.D.T.				
450	½	11/16	6	3	100	16	212.00
			1-2-3-off, S.P.				
471	½	3/8	10	5	100	15	250.00
			1-2-3-off, D.P.T.T.				
472	½	3/8	6	3	100	15	254.00
			1-2-3-off, D.P.				
473	½	3/8	6	3	100	15	250.00
			fwd-off-rev-off, D.P.D.T.				
480	½	3/8	6	3	100	15	214.00
			1-off-2-off, D.P.D.T.				
482	½	3/8	6	3	100	15	202.00
			Line Reversing, D.P.				
501	7/16	3/8	4	2	100	15	200.00
			on-off, T.P.S.T.				
841	½	3/8	6	3	100	15	260.00
			1-off-2-off, T.P.D.T.				
842	½	3/8	6	3	100	15	260.00
			1-2-3-off, T.P.T.T.				
843	½	3/8	6	3	100	15	280.00

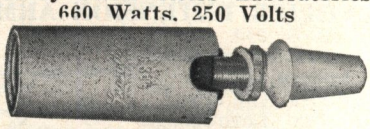
No. 1080 Plastic Housing for above Special Use Switches Nos. 206. 265, 272, 276, 282, 450, and 480 is furnished at $30.00 per 100 extra.

Brass Caps and Casings for above Special Use Switches Nos. 400, 402, 404, and 406 furnished at $40.00 per 100 list. Not available for No. 4730.

LEVOLIER FIXTURE SOCKETS

Approved by Underwriters' Laboratories, Inc.

660 Watts, 250 Volts



No. 121

For brackets and chandeliers using candles, husks or other types of socket covers. The lever at the bottom serves as a finishing knob and does away with the unsightly black keys, slots in husks or chains coming out at the side.

Cat. No.	Des. Nipple	Des. Lever	Std. Pkg.	Carton	Std. Pkg. Wt.	Price Per 100
103	5/8"	Brass	100	10	13 lbs.	$102.00
119	5/8"	Plain	100	10	12 lbs.	102.00
121	5/8"	Porcelain	100	10	13 lbs.	106.00
122	3/8"	Porcelain	100	10	15 lbs.	104.00
127‡	Square Shank		100	10	14 lbs.	98.00
128	—	Porcelain	100	10	———	12.00

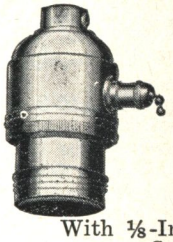
‡The No. 127 has 7/16" square shank which fits into ½" square hole of fixture.

McGILL LEVOLIER LAMPHOLDERS

Approved by Underwriters' Laboratories, Inc.

4100 SERIES BRASS LAMPHOLDERS

Single Circuit—Lever Operated—Push Button
660 Watt—250 Volt



This unit uses a lampholder mechanism with No. 41 Levolier switch. Available with ⅛-inch, ⅜-inch, ¼-inch and pendant cap, bead chain or plain lever. No. 4100-PB with Push Button control involves this basic mechanism and provides the same action.

	With ⅛-Inch Cap Cat. No.	Price Per 100	With Pendant Cap Cat. No.	Price Per 100	Std. Pkg. Wt.
Pull Chain	4100	$130.00	4101	$126.00	20
Fibre Lever	4100-FL	130.00	4101-FL	126.00	18
Plain Brass Lever	4100-PL	130.00	4101-PL	126.00	19
Red Plastic Push Button	4100-PB	130.00	4101-PB	126.00	18
WITH NIPPLE:					
Pull Chain	.....	.....	4102	130.00	21
Fibre Lever	.....	.....	4102-FL	130.00	19
Plain Brass Lever	.....	.....	4102-PL	130.00	20
	With ⅜-Inch Cap		With ¼-Inch Cap		
Pull Chain	4103	140.00	4104	140.00	20
Fibre Lever	4103-FL	140.00	4104-FL	140.00	18
Plain Brass Lever	4103-PL	140.00	4104-PL	140.00	19
Red Plastic Push Button	4103-PB	140.00	4104-PB	140.00	18
	With ⅜-Inch Cap and Cord Clamp				
Pull Chain	44103	160.00	.....	.....	21
Fibre Lever	44103-FL	160.00	.....	.....	19
Plain Brass Lever	44103-PL	160.00	.....	.....	20
Red Plastic Push Button	44103-PB	160.00	.....	.....	19

Also available in two circuit.

4400 SERIES PHENOLIC LAMPHOLDERS



The 4400 series is available with either UNIVERSAL LEVER with pull chain or plain lever, or with PUSH-BUTTON control. It can be equipped with ⅛", ¼", ⅜" and pendant caps.

Single Circuit With Shade Threads
Lever Operated—Push Button
660 Watt—250 Volt

	With ⅛-Inch Cap Cat. No.	Price Per 100	With Pendant Cap Cat. No.	Price Per 100	Std. Pkg. Wt.
Pull Chain	4400	$140.00	4401	$140.00	23
Fibre Lever	4400-FL	140.00	4401-FL	140.00	21
Plain Brass Lever	4400-PL	140.00	4401-PL	140.00	22
Red Plastic Push Button	4400-PB	140.00	4401-PB	140.00	21
WITH NIPPLE:					
Pull Chain	.....	.....	4402	140.00	24
Fibre Lever	.....	.....	4402-FL	140.00	22
Plain Brass Lever	.....	.....	4402-PL	140.00	23
	With ⅜-Inch Cap		With ¼-Inch Cap		
Pull Chain	4403	140.00	4404	140.00	23
Fibre Lever	4403-FL	140.00	4404-FL	140.00	21
Plain Brass Lever	4403-PL	140.00	4404-PL	140.00	22
Red Plastic Push Button	4403-PB	140.00	4404-PB	140.00	21
	With ⅜-Inch Cap and Cord Clamp				
Pull Chain	44403	160.00	.....	.....	24
Fibre Lever	44403-FL	160.00	.....	.....	22
Plain Lever	44403-PL	160.00	.....	.....	23
Red Plastic Push Button	44403-PB	160.00	.....	.....	22

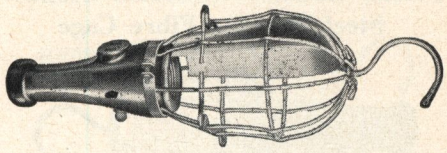
Also available in two circuit.

McGILL PORTABLE LAMP GUARDS

Approved by Underwriters' Laboratories, Inc.

No. 5000 SERIES PORTABLE LAMP GUARDS

Phenolic Molded Handle with Convenience Outlet



A DeLuxe Portable Lamp Guard with an Underwriters' Approved convenience outlet built into an impact resisting brown phenolic plastic handle. Sturdily constructed with a 15 Amp. 125 volt, 10 Amp. 250 volt outlet, 660 watt, 250 volt socket, cord strain relief and cord seal.

No-Rol cage of heavy steel wire, zinc plated and electrically welded. Especially handy for all repair work because of convenience outlet and oil- and grease-proof handle. Available with or without Levolier switch.

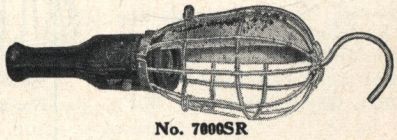
Cat. No.	Description	Wt. Oz. Each	Price Each
5000	Lamp size max. 100-w, RS, Keyless Socket ...	17	$3.40
5000R	No. 5000 with Reflector..	21	3.60
5000S	No. 5000 with Levolier Switch	17	3.90
5000SR	No. 5000 with Reflector and Levolier Switch		
5000M	Lamp size max. 50-w, RS Keyless	15	3.30
5000MR	No. 5000M w/reflector ..	17	3.50
5000MS	No. 5000M w/Levolier Switch	15	3.80
5000MSR	No. 5000M w/reflector and Levolier Switch ..	17	4.00

McGILL PORTABLE LAMP GUARDS

Approved by Underwriters' Laboratories, Inc.

No. 7000 SERIES PORTABLE LAMP GUARDS

Neoprene-Butyl Handle—Closed End Cage



No. 7000SR

Gray Neoprene-Butyl handle equipped with 660 watt, 250 volt socket. Electrically welded steel wire cage with No-Rol feature, heavily zinc plated. Exceptionally sturdy and serviceable for general portable lighting applications.

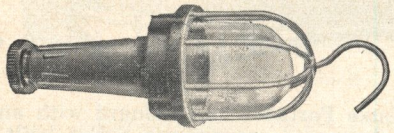
Cat. No.	Description	Wt. Oz. Each	Price Each
7000	Lamp size max. 100-w, RS, Keyless Socket ..	19	$2.60
7000R	No. 7000 with Reflector.	23	2.80
7000S	No. 7000 with Levolier Switch	19	3.00
7000SR	No. 7000 with Reflector and Levolier Switch ..	22	3.20
7000M	Lamp size 50-w, RS, Keyless Socket	18	2.50
7000MR	No. 7000-M with Reflector	19	2.70
7000MS	No. 7000-M with Levolier Switch	17	2.90
7000MSR	No. 7000-M with Reflector and Levolier Switch	18	3.10

McGILL PORTABLE LAMP GUARDS

Approved by Underwriters' Laboratories, Inc.

No. 3006 SERIES PORTABLE LAMP GUARDS

Plastic Handle—Annealed Globe—Steel Wire or Fibre Cage



No. 3007

This strong, portable, sealed lamp guard is watertight, dust-tight and moisture-proof. The plastic handle and fibre cage on the No. 3007 are shockproof and non-sparking. A rubber gasket placed between the cage and handle absorbs all stress and strain, preventing breakage. The heavy glass protecting globe eliminates possibility of breakage of the lamp bulb inside from splashing liquids. Being airtight these guards are perfectly safe for use where vapor and dust infused air is prevalent. They have no equal for safety, service and convenience around flour mills, paint booths, finishing rooms, airports, warehouses, food processing plants, shipyards, aboard ships, and many other places.

Cat. No.	Description	Wt. Oz. Each	Price Each
3006	Lamp size max. 60-w, Steel cage, Keyless Socket	35	$9.50
3006R	No. 3006 with Reflector	38	10.50
3007	Lamp size max. 60-w, Fibre cage, Keyless Socket	32	10.50

GRIPON NON-LOCKING LAMP GUARDS

These guards are the same in construction as LoXon guards, except that the key locking device is replaced with plain steel screws. Full protection against breakage. Easily detached for lamp renewal. Gripon guards are built of heavily tinned steel wire, made to withstand hard use and abuse. For both regular and mill type lamps, brass shell and W.P. sockets.



No. 1608

Cat. No.	Lamp Size	Description	Wt. Lbs. Per Doz.	Price Each
2075	75W	for Brass Socket....	2½	$0.76
2075-A	75W	for W.P. Socket "A"	2¾	.76
2075-B	75W	for W.P. Socket "B"	3	.76
2100	100W	for Brass Socket....	3	.84
2100-A	100W	for W.P. Socket "A"	3	.84
2100-B	100W	for W.P. Socket "B"	3½	.84
2200	200W	for Brass Socket....	4	.96
2200-A	200W	for W.P. Socket "A"	4½	.96
2200-B	200W	for W.P. Socket "B"	4¾	.96
		With Reflectors		
2075-R	75W	for Brass Socket....	3½	1.00
2075-RA	75W	for W.P. Socket "A"	3¾	1.00
2100-R	100W	for Brass Socket....	4½	1.06
2100-RA	100W	for W.P. Socket "A"	4¾	1.06

All LoXon and Gripon Guard Numbers followed by "A" fit Weather Proof Sockets with bottom bead measuring 1⅞" to 1¹⅛" in extreme diameter; Numbers followed by "B" fit 1¾" extreme diameter.

COMPLETE SERVICE LIGHTS

With Cord and Plug Attached

The Lamp Guards listed may be ordered as complete assemblies with either 25 or 50 feet of cord. The 5000 and 8000 series ungrounded models are equipped with 18-2 SJ black rubber cord and plug; the 7000 series ungrounded models are equipped with 18-2 SJ pearl gray cord and plug.

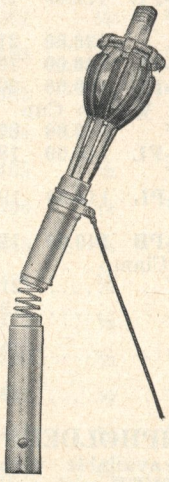
All grounded models are equipped with 16-3 SJ black rubber cord and plug.

To order, change the last two numbers of the catalog number to 25 or 50 (for either 25 or 50 feet of cord) and add to lamp guard price as follows:

	25′ Cord Set	50′ Cord Set
Ungrounded Models	$2.60	$4.50
Grounded Models	4.40	7.10

McGILL ADAPTABLE LAMP CHANGERS

With Rubber Covered Fingers and Coil Spring

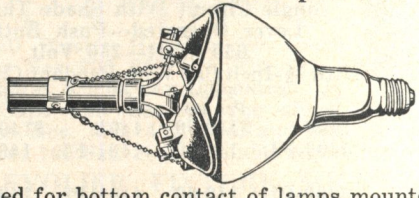


The McGill Adaptable Lamp Changer insures more convenient replacement of light bulbs in any location. A coil spring around the ends of the rubber covered fingers grips the bulb firmly.

The angle adjustment on the No. 150-CA and No. 151-CA, permits tilting of the head for bulbs in horizontal position. Indispensable for removing lamps from high inaccessible places in ceilings, signs, side walls, etc. Other models are furnished without angle adjustment.

Cat. No.	Lamp Size With Angle Adjustment	Wt. Oz. Each	Price Each
150-CA	15— 75-w	8	$5.50
151-CA	100—200-w	9	5.50
	No Angle Adjustment		
152-C	300— 500-w	10	6.00
153-C	750—1500-w	10	6.50
154-C	400-w Merc.	8	6.50
	Lamp		
155-C	R-52 & R-57 Lamp 500-700-w.	12	$7.50
156-C	PAR-38, R-40	12	6.00
158-C	E-H1 and J-H1 400-w. Merc.	14	7.50

With Rubber Suction Cap Assembly

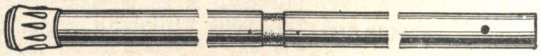


Designed for bottom contact of lamps mounted flush in window lighting and similar installations. Three rubber suction cups securely grip the bottom of 200-watt, spot or flood lamps.

Cat. No.	Description	Wt. Oz. Each	Price Each
157-C	Suction Cups, 200-watt, spot or flood	5	$6.00

STEEL LAMP CHANGER POLES

Insulated for Safety



Available in 5 ft. sections, fully insulated and interchangeable. Opposite ends telescope and lock to complete desired multiple section length. A rubber bumper for the assembled pole end is furnished with each changer head — protects furniture and floors.

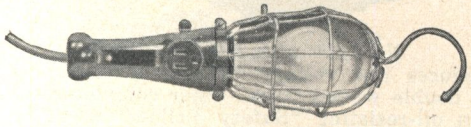
Cat. No.	Description	Wt. Oz. Each	Price Each
160-P	Steel Interchangeable, 5 ft. sections	24	$4.10

McGILL PORTABLE LAMP GUARDS

Approved by Underwriters' Laboratories, Inc.

5000-G GROUNDED LAMP GUARDS

With Phenolic Handle—Closed End Cage



No. 5000-G portables offer industry the first completely grounded lamp guard that is equipped with an approved 3-wire convenience outlet. The cage is grounded by means of internal handle construction with a third terminal providing contact with the attached cord. The convenience outlet is a part of the molded phenolic handle. Also available without convenience outlet (plain handle) and designated by catalog number 5500.

With Convenience Outlet

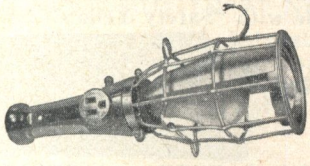
Cat. No.	Description	Wt. Oz. Each	Price Each
5000-G	100-w, RS, Keyless Socket..	19	$4.30
5000-RG	No. 5000-G with Reflector .	22	4.50
5000-SG	No. 5000-G with Levolier Switch	19	4.80
5000-SRG	No. 5000-G with Reflector and Levolier Switch.....	22	5.00

Without Convenience Outlet—Plain Handle

5500-G	100-w, RS, Keyless Socket..	18	$4.10
5500-RG	No. 5500-G with Reflector..	21	4.30
5500-SG	No. 5500-G with Levolier Switch	18	4.60
5500-SRG	No. 5500-G with Reflector and Levolier Switch	21	4.80

5000-G GROUNDED LAMP GUARDS

With Concentrating Lens—Rotary Reflector



Grounded guards are available with either the standard closed end and reflector cage or with an open cage, having a concentrating end lens and rotating reflector. With the latter light can be beamed to otherwise inaccessible areas. Molded phenolic handles are equipped with a Levolier switch and convenience outlet designed to receive plugs having 2 parallel heads and U shaped third blade for ground. The complete assembly is designed to resist oils, greases, some acids, flame, moisture and abrasion.

With Convenience Outlet

Cat. No.	Description	Wt. Oz. Each	Price Each
5000-LRG	100-w, RS, Keyless Socket..	26	$6.40
5000-SLRG	No. 5000-LRG with Levolier Switch	26	6.90

Without Convenience Outlet—Plain Handle

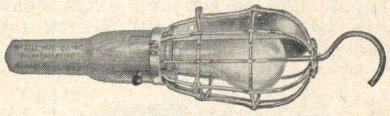
5500-LRG	100-w, RS, Keyless Socket..	26	$6.20
5500-SLRG	No. 5500-LRG with Levolier Switch	26	6.70

McGILL PORTABLE LAMP GUARDS

Approved by Underwriters' Laboratories, Inc.

No. 8000 SERIES PORTABLE LAMP GUARDS

Hard Wood Handle—Closed End Cage



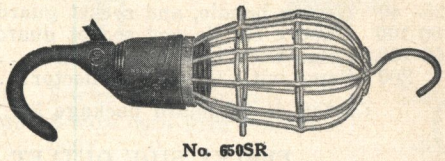
No. 8000SR

The 8000 series portable lamp guards are built with polished wood handles and 660-watt, 250 volt sockets. Electrically welded No-Rol steel wire cages, heavily zinc plated. More generally serviceable around oil and grease.

Cat. No.	Description	Wt. Oz. Each	Price Each
8000	Lamp size max. 100-w, RS, Keyless Socket ...	17	$2.60
8000R	No. 8000 with Reflector.	20	2.80
8000S	No. 8000 with Levolier Switch	17	3.00
8000SR	No. 8000 with Reflector and Levolier Switch...	20	3.20
8000M	Lamp size max. 50-w, RS, Keyless Socket	15	2.50
8000MR	No. 8000M with Reflector	17	2.70
8000MS	No. 8000M with Levolier Switch	15	2.90
8000MSR	No. 8000M with Reflector and Levolier Switch ..	17	3.10

No. 650 SERIES PORTABLE LAMP GUARDS

Approved by Underwriters' Laboratories, Inc.



No. 650SR

Moulded black rubber handle formed with steel reinforced hook. Pliable socket section holds 660 watt, 250 volt socket, and cord strain relief disk.

No-Rol cage of heavy steel wire, zinc plated and electrically welded. Hook on both cage and handle insures more convenient application of portable lighting.

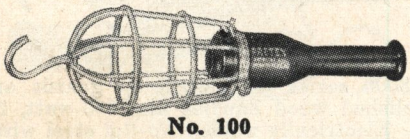
Rubber Hook Handle—Closed End Cage

Cat. No.	Description	Wt. Oz. Each	Price Each
650	Lamp size max. 100-w, RS, Keyless Socket ..	23	$3.30
650R	No. 650 with Reflector..	26	3.50
650S	No. 650 with Levolier Switch	23	3.70
650SR	No. 650 with Reflector and Levolier Switch	26	3.90
650M	Lamp size max. 50-w, RS, Keyless Socket ..	21	3.20
650MR	No. 650M with Reflector	22	3.40
650MS	No. 650M with Levolier Switch	21	3.60
650MSR	No. 650M with Reflector and Levolier Switch ..	22	3.80

WOODHEAD PROTEX PORTABLE HAND EXTENSION LAMPS

Now made with "SAFETY YELLOW" NEoTEX

Are approved by National Board of Fire Underwriters and endorsed by most fire insurance companies. Consists of an oil-proof "Safety Yellow" Neotex handle and socket and extra heavy plated steel guard with swivel hook. Neotex handle impervious to oils, greases and most chemicals.

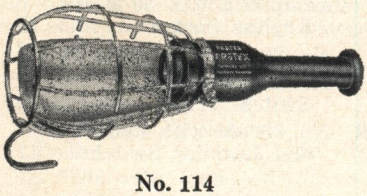


No. 100

CLOSED END GUARD
"Safety Yellow" NEoTEX Handle

Cat. No.	Watts	Description	Price
100	60	Neotex handles, socket & guard	$4.80
102	75-100	Neotex handles, socket & guard	4.95
104	60	Same with ½ shade reflector...	5.45
106	75-100	Same with ½ shade reflector...	5.70
103	200	Neotex handle, socket & guard	6.15
107	200	Same with ½ shade reflector...	6.80

Carton 6—Standard package 30.



No. 114

OPEN END GUARD
"Safety Yellow" NEoTEX Handle

Cat. No.	Watts	Description	Price
109	25- 40	Neotex handle, and socket guard	$4.70
110	60-100	Neotex handle and socket guard	5.20
114	60-100	Same with ½ shade reflector...	5.95
115	200	Same with ½ shade reflector...	6.80

Carton 6—Standard package 30.



No. 102-K

PRoTEX SIDE OUTLET PORTABLES

Parallel or 2 pole polarity and 3 pole connector inserted in side of handle for auxiliary tools, etc.

Inner-Lock type contacts insure positive grip.

When side outlet is required add to list the following letters and prices:

"K" Parallel Type	$1.45
"T" 2 wire Polarity	1.65
"U" 3 wire Nema U-Blade Type	1.80
"Y" 3 wire Polarity	1.90
"X" 2 wire Turnex Type	1.50

PRoTEX Portables with "Safety Yellow" Cord

Complete with 25 feet of 18-2-S cord and No. 1404 plug cap with bright chrome yellow polyvinyl chloride cover. Also includes No. 1404 plug cap made of "Safety Yellow" NEoTEX.

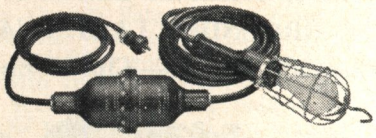
40- 60 Watt No. 100-25	$12.85
75-100 Watt No. 102-25	13.05

Add $8.20 to any PRoTEX catalog number. This price includes cost of No. 1404 plug cap and 25 ft. of 18-2-S "Safety Yellow" cord.

Carton 6. Std. Pkg. 30.

SAFEWAY LoVOLT PORTABLE STEP-DOWN TRANSFORMER

Now made with "SAFETY YELLOW" NEoTEX



No. 1600 with No. 102 PRoTEX

Reduces line voltage to safe 6 volts. Consists of a double wound transformer completely enclosed in an oil-resisting "Safety Yellow" NEoTEX Synthetic Rubber Case and is completely watertight. Number 16-3 yellow cord primary. All transformers are tested for 1600 volt breakdown between windings and for each coil to ground. Number 14-2 yellow cord secondary. PRoTEX or VAPRoTEX PORTABLE HAND LAMPS OPTIONAL WITH THE TRANSFORMER UNIT.

No. 1600	Wired complete with No. 102 PRoTEX unit ..... Each	$81.10
No. 1620	Wired complete with No. 1201 steel guard VAPRoTEX unit ..... Each	92.90

SAFEWAY TWINS AND SCREW BASE PLUG

Made with "Safety Yellow" NEoTEX



No. 1535



No. 720



No. 1536

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.	Price Each
1535	Screw Base Plug..	10	100	18	$2.20
720	Double Socket	5	50	20	2.95
1536	Double Parallel Receptacle	10	100	20	3.25
1537	Combination Socket and Receptacle..	10	100	20	3.10

New MULTI-TAP Outlet Box

Made with "Safety Yellow" NEoTEX



BUILT for SAFETY and SERVICE . . . full NEoTEX box construction is impervious to oils, greases and most chemicals . . . will not scratch surfaces over which it is pulled.

Cat. No.	Description	Std. Pkg.	Wt. Each	List Each
31550	15 A. 125 V. parallel "K" Type	1	2 lbs.	$14.40
31551	15 A. 125 V. polarity "T" Type	1	2 lbs.	14.45
31552	3-wire 15 A. 125 V.—10 A. 250 V. Crowfoot "Y" Type	1	2 lbs.	15.25
31593	3-wire 15 A. 125 V. Nema "U" Type	1	2 lbs.	15.25
32550	10 Amp. 2-wire Turnex "X" Type	1	2 lbs.	15.70
32553	10 Amp. 3-wire Turnex Type	1	2 lbs.	17.45
32753	20 Amp. 3-wire Turnex Type	1	2 lbs.	18.35

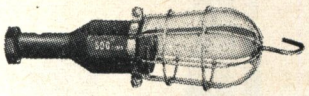
MULTI-TAP BOXES WITH CORD

All Multi-tap boxes are available with cord. Prices on application. Specify cord size, number of conductors and length.

DANIEL WOODHEAD COMPANY

"500" LINE

Rubber Handle Portable Lamps



No. 504

A sturdily constructed portable lamp built for the average user. It has a heavy duty rubber handle and guard, locked in weatherproof socket, and taped splice for strain relief. Does not have binding screws and no strain relief disc is necessary. It is made in sizes 60 to 100 watt with open or closed end guards.

"500" LAMPS WITH CLOSED END GUARDS

Cat. No.	Reflector	Size Watts	Carton	Std. Pkg.	Package Weight	List Each
500	no	60	6	30	40 lbs.	$2.35
502	no	75-100	6	30	41 lbs.	2.45
504	yes	60	6	30	44 lbs.	2.55
506	yes	75-100	6	30	47 lbs.	2.65

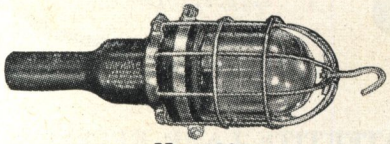
"500" LAMPS WITH OPEN END GUARDS

Cat. No.	Reflector	Size Watts	Carton	Std. Pkg.	Package Weight	List Each
508	Discontinued, use No. 510					
510	no	75-100	6	30	43 lbs.	$2.45
512	Discontinued, use No. 514					
514	yes	75-100	6	30	51 lbs.	2.60
523	Consists of No. 500 with 25 ft. of No. 18-2 "SJ" cord and cap					5.74
524	Consists of No. 500 with 25 ft. of No. 18-2 "S' cord and cap					8.14

WOODHEAD VAPROTEX LAMPS

Now made with "Safety Yellow" NEOTEX

Approved by Underwriters' Laboratories, Inc., and recommended for use where gases and dust and other explosives exist. Consists of high grade oil-proof "Safety Yellow" Neotex handle and socket, heavy plated steel or aluminum guard, and special heat and shock resisting glass globe.



No. 1200

VAPROTEX

Cat. No.	Watts	With Steel Wire Guards Pkg. Wt.	With Steel Wire Guards Price Each	With Non-Sparking Aluminum Guards Cat. No.	With Non-Sparking Aluminum Guards Pkg. Wt.	With Non-Sparking Aluminum Guards Price Each
1200	60-75	36	$15.55	1204	44	$23.50
1201	100	38	16.75	1205	48	24.45
*1202	60-75	40	17.35	*1206	46	25.30
*1203	100	42	18.55	*1207	51	26.25

* With sealing gland in handle.

Carton 2—Std. Pkg. 12

Ground clip for third wire for any of above, add "GC" to number and $0.65 list each.

Vaprotex wire guards with NEoTEX covering—if desired, specify the letter (I) after any of the above wire guard types and add $5.25.

TURNEX LOCKING CAPS AND CONNECTORS

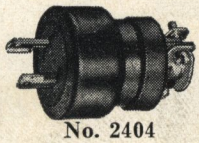
Copyrighted, Patented and Patents Pending

10 Amperes—250 Volts; 15 Amperes—125 Volts

Turnex is a rugged and economical all "Safety Yellow" Neotex locking cap and connector, interchangeable with other locking caps and connectors. Can be subjected to the most severe service. Has heavy duty rubber cover and molded in cord grip, large enough for the heavier portable cords, laminated phenolic inserts, and extra heavy brass contacts.



No. 2502



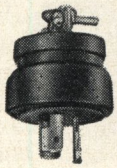
No. 2404

TURNEX CAPS AND CONNECTORS

Cat. No.	Description	List Each
2404	Two wire cord grip cap	$1.00
2407	Three wire cord grip cap	1.20
2502	Two wire cord grip connector	1.35
2508	Two wire cord grip connector	2.25

Carton 10—Std. Pkg. 100

TURNEX CAP and CONNECTOR
20 Amp.—250 Volt, AC or DC
10 Amp.—575 Volt, AC



No. 2608



No. 2708

No. 2608 3-wire cord grip cap ..... List $1.55

No. 2708 3-wire cord grip connector body ..... List 2.35

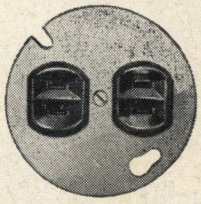
Carton 10—Std. Pkg. 50

May be assorted with SAFEWAY caps and connectors to make std. pkg.

SAFEWAY DUPLEX RECEPTACLES



No. 800



No. 802

Carton 5
Std. Pkg. 25

Cat. No. 800 Parallel List $1.95	Cat. No. 802 Parallel, 3¼" Cover List $2.15	Cat. No. 804 Parallel, 4" Cover List $2.25
Cat. No. 801 Polarity List $2.05	Cat. No. 803 Polarity, 3¼" Cover List $2.25	Cat. No. 805 Polarity, 4" Cover List $2.35

WOODHEAD WIRING DEVICES

SAFEWAY NEOTEX COVERED PLUGS

Made with "Safety Yellow" NEOTEX

Built for heavy duty industrial and railroad service. Brass blades mounted on a disc and can be removed from body.

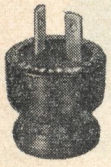
15 Amperes 125 Volts 10 Amperes 250 Volts



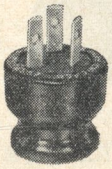
2-Wire Cap
Parallel
No. 1400
Cord hole 7/16
Carton 10
Std. pkg. 100
Pkg. wt., lbs. 12
List, ea... .60



2-WIRE TANDEM
No. 1401
Cord hole 7/16
Carton 10
Std. pkg. 100
Pkg. wt., lbs. 12
List, ea... .70



2-WIRE POLARITY
No. 1402
Cord hole 7/16
Carton 10
Std. pkg. 100
Pkg. wt., lbs. 12
List, ea... .70



3-WIRE GROUNDED
No. 1403
Cord hole 7/16
Carton 10
Std. pkg. 100
Pkg. wt., lbs. 18
List, ea... .80



2-WIRE CAP CORD GRIP
Parallel
No. 1404
Cord hole 7/16
Carton 10
Std. pkg. 100
Pkg. wt., lbs. 16
List, ea. .. .90



2-WIRE TANDEM CORD GRIP
No. 1405
Cord hole 7/16
Carton 10
Std. pkg. 100
Pkg. wt., lbs. 16
List, ea.. $1.00



2-WIRE POLARITY CORD GRIP
No. 1406
Cord hole 7/16
Carton 10
Std. pkg. 100
Pkg. wt., lbs. 16
List, ea.. $1.00



3-WIRE GROUNDED CORD GRIP
No. 1407
Cord hole 7/16
Carton 10
Std. pkg. 100
Pkg. wt., lbs. 22
List, ea.. $1.15

Can be had with cord holes ¼ to ⅝ inch on specifications.

SAFEWAY (Inner-Lock) CONNECTOR

Made with "Safety Yellow" NEOTEX



NO CORD GRIP

		List
No. 1500	Parallel	$1.00
No. 1501	Polarity	1.10



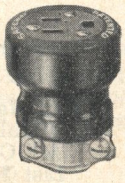
WITH CORD GRIP

		List
No. 1502	Parallel	$1.30
No. 1503	Polarity	1.40
No. 1508	3-Wire	1.70



3-WIRE GROUNDED PLUG CAP
"U" Blade
Nema type with cord grip.
No. 1447
Cord hole—7/16"
Carton—10
Std. Pkg.—100
Pkg. Wt. 19 Lbs.
List, ea. $1.15

No. 1447



3-WIRE GROUNDED CONNECTOR
"U" Blade
Nema type with cord grip.
No. 1547
Cord hole—7/16"
Carton—10
Std. Pkg.—100
Pkg. Wt. 20 Lbs.
List, ea. $1.70

No. 1547

Assortment of Safeway Plugs and Cord Connectors in carton lots permitted to make Standard Package.

PROTEX NEOTEX COVERED SOCKETS

Made with "Safety Yellow" NEOTEX

Keyless Type and also with Push-Thru Switch



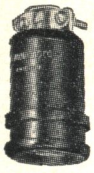
No. 700



No. 705



No. 710



No. 717

Push Socket

Cat. No.	Type		List	Cat. No.	Type		List
700	7/16"	Pendant	$2.50	703	⅜"	Bushed	$3.15
701	⅛"	Bushed	2.70	704	½"	Bushed	3.25
702	¼"	Bushed	2.95	705	⅝"	Grip	3.50

Keyless Socket

Cat. No.	Type		List	Cat. No.	Type		List
710	7/16"	Pendant	$1.25	713	⅜"	Bushed	$2.10
711	⅛"	Bushed	1.50	714	½"	Bushed	2.15
712	¼"	Bushed	1.65	717	½"	Grip	1.45

Carton 10 — Std. Pkg. 50

WATERTITE NEOTEX SOCKET

Unbreakable "Safety Yellow" Neotex weatherproof socket, positively watertight at both ends . . . used in underwater lighting. Soft lip fits tightly against lamp forming watertight seal.

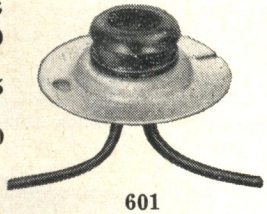


600

May be used under water.

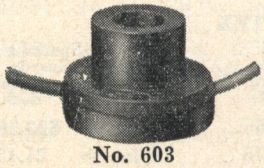
Cat. No.	Type	List
600	"Watertite"	$0.80
601	"Watertite" 3¼"	0.95
602	"Watertite" 4"	1.00

Carton 10
Std. Pkg. 100

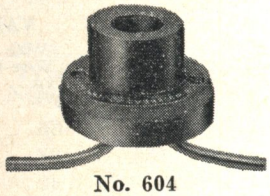


601

WATERTITE LAMP RECEPTACLES



No. 603



No. 604

Cat. Nos. 603 and 604

Cat. No.	Carton	Std. Pkg.	List Each
603	10	100	$1.55
604	10	100	$1.55

Carton 10 — Std. Pkg. 100

SECTION 4

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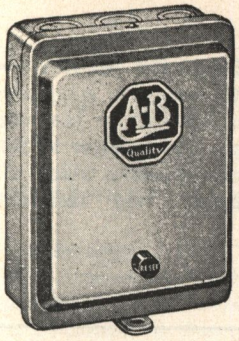
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MOTORS • PANELBOARDS
SWITCHES • CONTROLS
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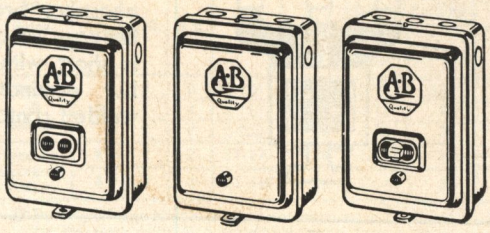
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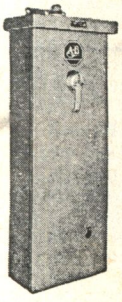
— ALLEN-BRADLEY — Standard Enclosures For All Applications and Locations —



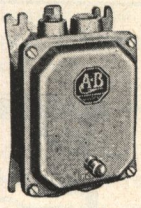
Nema Type 1 — General Purpose — This sheet steel enclosure is suitable for general purpose applications wherever atmospheric conditions are normal. Intended primarily to prevent accidental contact with the control apparatus.



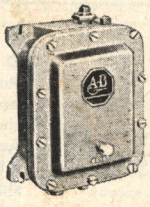
Three Handy Forms—Most enclosures are stocked in three handy forms. Form 1 saves the cost of installing a push button; Form 2 is best for remote control; and Form 3 is handy for pumps, fans, compressors and other machines that require testing or manual control.



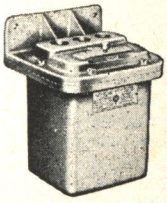
Nema Type 3—Weather Resistant—Type 3 enclosures, with drip hood and screened louvered openings, protect against rain and sleet in such outdoor applications as docks, canal locks, subways and construction work.



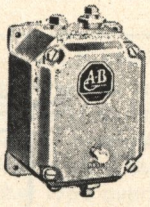
Nema Type 4—Watertight—This enclosure is suitable for outdoor application on ship docks, and in dairies, breweries, etc. May be hosed down.



Nema Type 7—Hazardous Gas Locations - Meets requirements of the NEC for Class 1, Group D, hazardous locations such as found in oil fields.



Nema Type 8—Corrosive Hazardous Gas Locations — Meets requirements of the NEC for class 1, Group D, hazardous locations. Oil-immersed contacts.



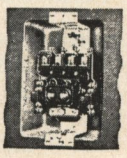
Nema Type 9—Hazardous Dust Locations—Meets NEC requirements for Class 2, Groups F and G hazardous locations such as found in flour mills.



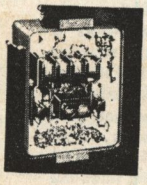
Nema Type 11 Corrosion-Proof—Both acid and fume resistant. Suitable for use in corrosive atmospheres. Contacts are oil-immersed.



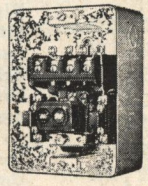
Nema Type 12 Dust-tight — Industrial Use Enclosure —Designed for use in automotive and other mass production industries where enclosure is required to provide protection against dirt and oil. Also suitable for Nema Type 5 application.



Nema Type 1B1



Nema Type 1B2

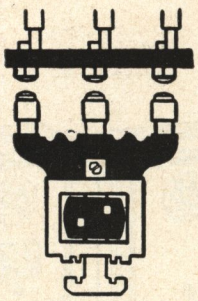


Nema Type 1B3

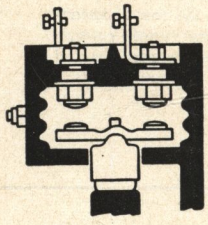
Flush Type Enclosures — Nema Type 1B, are used to mount starters within cavities in machine tool frames and plaster walls.

For Complete Information Refer to Allen-Bradley Handy Catalog

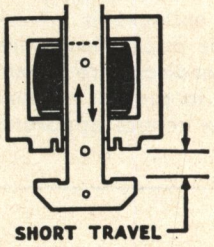
ALLEN-BRADLEY—Design Features



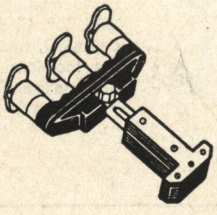
Simple Up and Down Solenoid Motion — The magnetic plunger operates freely in a smooth phosphor bronze sleeve, unhampered by intricate linkages or other moving parts. The plunger stroke is short with an up and down motion, which all but eliminates contact rebound and resultant welded contacts.



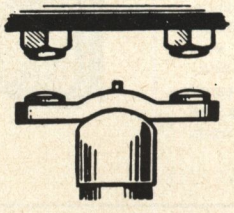
Confined Arc — No Flashover — Each pair of contacts is enclosed in an individual arc chamber to prevent flashover and assist in arc rupture.



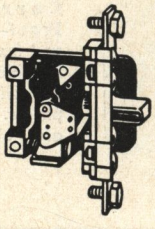
Reliable Mechanism — Allen-Bradley solenoid plungers operate practically without friction. Because they are fast, consistent and trouble-free, A-B starters are best for modern machine and automation duty.



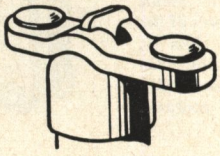
One Moving Part—Less moving parts mean less chance of trouble. And that is why Allen-Bradley starters, size 0 to 7 are designed with just one moving part . . . the simple magnetic plunger with double break movable contacts.



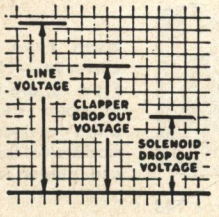
Double Break Contacts — Double break contacts, by cutting voltage on each contact to ½, provide high arc rupturing capacity and longer contact life. No jumpers to break and cause trouble.



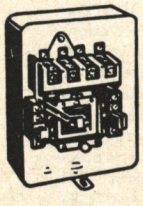
Reliable Overload Protection —Dependable solder ratchet overload relays are used on all starter sizes to provide accurate running and starting protection.



Silver Alloy Contacts — Cadmium silver contacts form oxides which do not interfere with their operation. Maintenance free, they are a "must" where bolted enclosures are concerned.



High Magnetic Efficiency—As a result of superior design, A-B starters have inherently low drop out and pick up voltages . . . will "hold in" without chattering when line voltage fluctuates.



Adaptable Compact Unit—High rating plus compact mechanism go together in Allen-Bradley starters . . . a great advantage in assembly of special control panels.

For Complete Information Refer to Allen-Bradley Handy Catalog

ALLEN-BRADLEY — D.C. Apparatus

Bulletin 200 Control Relays



Bulletin 200 Type G

Max. Ratings:—Type G— 5amps., 64 volts or less; 2 amps., 115 volts, 0.5 amps., 230 volts.
Type EX—10 amps., 64 volts or less; 5 amps., 115 volts, 1 amp., 230 volts.
Standard Voltages:—6, 12, 24, 32, 64, 115 and 230 volts.

Combinations of "N.O." and "N.C." contacts in two to eight pole construction can be furnished. Relays also available for thermostat operation and mechanical latch operation.

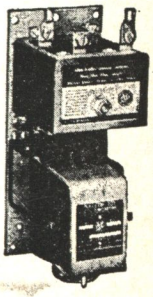
Prices

Type of Relay	No. of Poles	Contacts N.O.	Contacts N.C.	OPEN Type No.	OPEN Price	ENCLOSED Nema Type 1 General Purpose Type No.	ENCLOSED Nema Type 1 General Purpose Price	ENCLOSED Nema Type 4 Watertight ❶	ENCLOSED Nema Type 7 Class 1 Group D ❶
Type G Relays	2	2	0	G-200	$18	G-20	$21	$38	$74
		1	1	G-110	21	G-11	24	41	77
		0	2	G-020	21	G-02	24	41	77
Type EX Universal Relays	2	2	2	EX-220	23	EX-22	26	59	79
	4	4	4	EX-440	30	EX-44	33	76	86

❶ The listed "Type No." is for the relay enclosed in the Nema Type 1 enclosure. For the same relay in a watertight Nema Type 4 enclosure, append the numeral 4; similarly, the Nema Type 7 enclosure appends the numeral 7.

Discount Schedule A

Bulletin 202 Contactors



For accurate repetitive switching of lighting and power circuits, battery charging circuits and similar applications.

Available in normally open construction only, Bulletin 202's are supplied with an interlock contact for use on three wire control.

Sizes 1 through 4 have solenoid operation with contacts of the silver alloy type. Sizes 5 and 6 are of the clapper type construction, having copper to copper rolling contacts and arc shields and blowout coils.

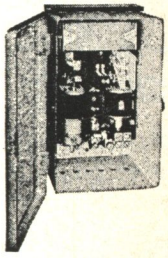
Prices

Size	Ampere Rating 250 Volts Max. Open	Ampere Rating 250 Volts Max. Enclosed	Single Pole Nema Type 1 Enclosed	Single Pole Open Type	Double Pole Nema Type 1 Enclosed	Double Pole Open Type
1	25	22.5	$82	$62	$95	$75
2	50	45	110	71	161	117
3	100	90	150	104	231	176

Prices include interlock contact for three wire control. If interlock contact is not wanted, deduct **$9** from list prices.

Discount Schedule A

Bulletin 265 Reduced Voltage Starters



For automatic acceleration of shunt, series, and compound wound direct current motors. Not suitable for jogging service or continued operation at reduced speed. Starting resistors are Nema Classification 115 designed for one 5-second start each 80 seconds. Bulletin 265 may be used where starting load varies over a large range, such as pumps, compressors, fans or conveyors.

Prices

Nema Type 1 Enclosure
250 Volts Maximum

Prices Include—One Type N overload relay heater element which can be omitted or supplied at **$1.50** list each.

H. P.	115 Volts Catalog No.	115 Volts Price	230 Volts Catalog No.	230 Volts Price
1	265BAG61	$141	265BAH61	$141
1½	265BAG62	141	265BAH62	141
2	265BAG63	141	265BAH63	141
3	265BAG64	141	265BAH64	141
5	265CAG65	256	256BAH65	159
7½	—	—	265CAH66	185
10	—	—	265CAH67	256

Discount Schedule A

Bulletin 209 Magnetic Starters

Max. Ratings: 1½ H.P. 115 V, 2 H.P. 230 V

These solenoid operated starters have only one moving part, the magnet core which carries the movable contacts. These silver alloy contacts bridge the stationary contacts which are fastened securely to the molded arc hood. Reliable overload protection is provided by a Bulletin 815 solder ratchet type overload relay.

Bulletin 205 Reversing Magnetic Starters

Max. Ratings: 1½ H.P. 115 V, 2 H.P. 230 V

For starting and reversing small D.C. motors. Bulletin 205 consists of two contactors mounted side by side. Mechanical and electrical interlocks prevent both contactors from closing at the same time. Contactors are the two pole solenoid type with double-break silver alloy contacts. Each Bulletin 205 is equipped with a Bulletin 815 solder ratchet type overload relay to provide reliable overload protection.

Bulletin 267-268 Heavy Duty Reduced Voltage Starters

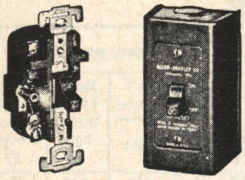
Max. Ratings: 75 H.P. 115 V, 150 H.P. 230 V

These starters automatically accelerate shunt and compound wound D.C. motors. Bulletin 267 is for use with constant speed motors and Bulletin 268 is for adjustable speed motors. Both provide definite time limit acceleration. Resistors are designed for one 10-second start each 80 seconds. Bulletins 267 and 268 are available for either non-reversing or reversing service. Non-reversing starters can be supplied with dynamic braking if required. Reversing starters have this feature as standard.

For Complete Information Refer to Allen-Bradley Handy Catalog

ALLEN-BRADLEY — Manual Full Voltage Starters

Bulletin 600 — Single Phase Manual Switches



Bulletin 600 Form 52 open type and Nema Type 1

MAXIMUM HORSEPOWER RATINGS:

Single Pole { **1 H.P., 110-220 V, A.C.** / **No D.C. rating**

Double Pole { **1 H.P., 110-220 V, A.C.** / **¾ H.P., 115-230 V, D.C.**

Bulletin 600 manual switches will start and protect small single phase A.C. and D.C. motors used with unit heaters, stokers, refrigeration compressors, fans, pumps, small tools, grinders, etc.

A toggle handle operates a quick make and break trip-free mechanism which opens and closes the double break silver alloy contacts. A solder ratchet type thermal overload relay provides the accurate overload protection needed with single phase fractional horsepower motors.

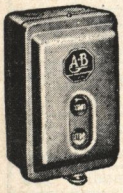
PRICES — Prices include one Type P heater element which can be omitted or supplied at $1 list each. Forms 92-92K-92P-92KP prices include two Type P elements.

No. of Poles	Description	Form No.	Nema Type 1 General Purpose Catalog No.	Nema Type 1 Price	Nema Type 4 Watertight Weatherproof Catalog No.	Nema Type 4 Price	Nema Type 7 Class 1—Group D Hazardous Locations Catalog No.	Nema Type 7 Price	Flush Mounting ③ Catalog No.	Flush Mounting ③ Price	Open Type Catalog No.	Open Type Price
1 Pole	**Toggle Type**	51	600TAX4	$7.50	600TCX4	$24	600TEX4	$24	600TKX4	$7	600TOX4	$6.50
	Key Type	51K	TAX48	9.50	—	—	—	—	TKX48	9	TOX48	8.50
	Lever Type	81	TAX148	8.50	—	—	—	—	—	—	TOX148	7.50
2 Pole	**Toggle Type**											
	Switch Only	52	600TAX5	8.50	600TCX5	25	600TEX5	25	600TKX5	8	600TOX5	7.50
	①with Pilot Light	52P	TAX109	14	—	—	—	—	TKX109	13.50	TOX109	13
	②with Pilot Light 110V	62	TAD7	19	TCD7	60	TED7	60	TKD7	18	—	—
	220V	62	TAA7	19	TCA7	60	TEA7	60	TKA7	18	—	—
	④with Selector Switch	72	TAX9	18	TCX9	60	TEX9	60	—	—	—	—
	with Selector Switch ①④and Pilot Light	72P	TAX142	24	—	—	—	—	—	—	—	—
	Two Switches in One Enclosure	92	TAX10	20	TCX10	60	TEX10	60	TKX10	19	—	—
	Two Switches in One Enclosure—Pilot Light ①On Both Switches	92P	TAX144	31	—	—	—	—	TKX144	30	—	—
2 Pole	**Key Type**											
	Switch Only	52K	600TAX49	10.50	—	—	—	—	600TKX49	10	600TOX49	9.50
	①with Pilot Light	52KP	TAX110	16	—	—	—	—	TKX110	15.50	TOX110	15
	②with Pilot Light 110V	62K	TAD51	21	—	—	—	—	TKD51	20	—	—
	220V	62K	TAA51	21	—	—	—	—	TKA51	20	—	—
	④with selector Switch	72K	TAX53	20	—	—	—	—	—	—	—	—
	with Selector Switch ①④and Pilot Light	72KP	TAX145	26	—	—	—	—	—	—	—	—
	Two Switches in One Enclosure	92K	TAX55	24	—	—	—	—	TKX55	23	—	—
	Two Switches in One Enclosure—Pilot Light ①on Both Switches	92KP	TAX147	35	—	—	—	—	TKX147	34	—	—
2 Pole	**Lever Type**	82	600TAX149	9.50	—	—	—	—	—	—	600TOX149	8.50

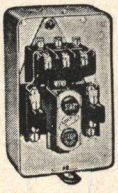
① Neon pilot light built in construction can be used on 110 or 208-220 volts.
② Incandescent bulb pilot light. Form 62 or 62K switches can be used for either 110 or 220 volts. Pilot light can be changed from one voltage to the other by merely changing the bulb to one of the proper voltage.
③ The flush mounting construction does not include the switch box.
④ Forms 72, 72P, 72K and 72KP are for use on A. C. only, they do not have a D. C. Rating.

Discount Schedule A

Bulletin 609 — Manual Starting Switches



Bulletin 609 Size 1 Nema Type 1



Bulletin 609 manual across-the-line starters for single phase or polyphase motors. "Start" and "Stop" buttons operate the quick-make, quick-break switch mechanism. Double break silver alloy contacts reduce maintenance. Solder ratchet type overload relays provide accurate overload protection.

PRICES — Prices include one Type N overload relay heater element for single phase and D.C. starters. Two Type N elements are included with 2 or 3 phase starters. Heater elements can be omitted or supplied at $1.50 list each or $3 list per pair.

Phase	Size	MAXIMUM H.P. RATINGS 110 Volt	208-220 Volt	440-550 Volt	Nema Type 1 General Purpose Catalog No.	Nema Type 1 Price	Nema Type 4 Watertight Weatherproof Catalog No.	Nema Type 4 Price	Nema Type 7 Class 1—Group D Class 2—Group F Class 2—Group G Hazardous Locations Catalog No.	Nema Type 7 Price	Nema Type 1B Flush Mounting with Box① Catalog No.	Nema Type 1B Price	Open Type Catalog No.	Open Type Price
Single Phase	0	1	1½	—	609AAX	$20	609ACX	$52	609AEX	$66	609ALX	$28	609AOX	$18
	1	1½	3	—	BAX	25	BCX	64	BEX	78	BLX	33	BOX	23
	1P	3	5	—	XAX	36	XCX	78	XEX	90	XLX	44	XOX	34
3 Phase (2 Phase, 3 Wire)	0	1½	2	3	609AAW	25	609ACW	57	609AEW	71	609ALW	33	609AOW	23
	1	3	5	7½	BAW	30	BCW	69	BEW	83	BLW	38	BOW	28
2 Phase—4 Wire (4 Pole)	0	1½	2	3	609AAY	35	609ACY	72	609AEY	86	609ALY	47	609AOY	33
	1	3	5	7½	BAY	42	BCY	90	BEY	104	BLY	54	BOY	40
D.C. (3 Pole) (2 Poles in Series)	0	1	1½	—	609AAV	20	609ACV	52	609AEV	66	609ALV	28	609AOV	18
	1	1½	2	—	BAV	25	BCV	64	BEV	78*	BLV	33	BOV	23

① Two other flush mounted constructions are available; **Type 1B1**—Same as Type 1B, except without back of panel enclosure. Prices for the Type 1B1 construction are $1 less than the listed prices for the Type 1B construction. **Type 1B3**—Designed for mounting in a plaster wall, complete with pull box and flush plate. Add $5 to prices of the Type 1B construction.

Mounting Pedestals — Single pedestal for mounting one Type 1 switch $6. Double pedestal for mounting two Type 1 switches $12.

Group Fusing — Size 0 enclosed switches are approved for group fusing up to and including a maximum H.P. of 2.

Three Overload Relays — Bulletin 609 switches can be supplied with a third overload relay at the following price additions: Size 0 or 1, Nema Type 1, 1B, Enclosure and Open Type — $6 list.

Discount Schedule A

Bulletin 609RS & 609TS — Manual Reversing and Two Speed Starters

Bulletin 609RS consists of two mechanically interlocked Bulletin 609 across-the-line starters wired for starting and reversing A.C. polyphase motors.

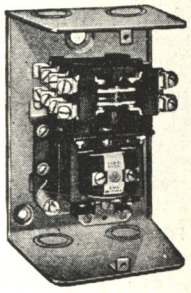
Bulletin 609TS is similar in construction to 609RS except that it is wired to control two speed separate winding star-connected A.C. polyphase motors.

For Complete Information Refer to Allen-Bradley Handy Catalog

ALLEN-BRADLEY—Bulletin 700 A.C. Control Relays

Type BX—Universal Type Relays

BX Universal Relays are designed for industrial applications that require long life and accurate repetitive ability. A variety of open and closed contact arrangements can be attained without disassembling the relay. Contacts are convertible from "N.O." to "N.C." by simply changing the wire connections from the ← top N.O. terminals to the ← bottom N.C. terminals. "N.O." and "N.C." contacts at the same pole must have the same polarity.



Max. Rating — 10 Amperes, Non-Inductive Load.
Standard Voltages — 6, 12, 24, 32, 64, 110, 220, 440, and 550 volts.
Standard Frequencies — 60, 50, and 25 cycles.

Prices

No. of Poles	Contacts N.O.	Contacts N.C.	OPEN TYPE Type No.	OPEN TYPE Price	ENCLOSED Nema Type 1 General Purpose Type No.	ENCLOSED Nema Type 1 General Purpose Price	ENCLOSED Nema Type 4 Watertight Weather-proof ①	ENCLOSED Nema Type 7 Class 1, Group D Hazardous Locations ①
2	2	2	BX-220	$18	BX-22	$21	$54	$74
4	4	4	BX-440	23.50	BX-44	27	60	80
6	6	4	BX-640	35	BX-64	38	71	91
8	8	4	BX-840	41	BX-84	44	77	97

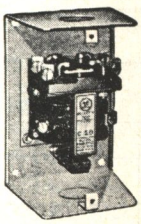
① The listed "Type No." is for the relay enclosed in the Nema Type 1 enclosure. For the same relay in a watertight Nema Type 4 enclosure, append the numeral 4; similarly, the Nema Type 7 enclosure appends the numeral 7.

Discount Schedule A

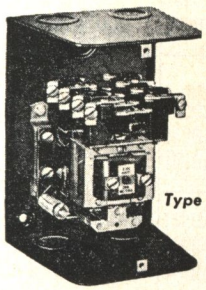
Type B and C—General Purpose Relays

A small rugged reliable industrial relay. Combinations of "N.O." and "N.C." contacts in two to eight pole construction can be furnished. Solenoid operated double break silver alloy contacts assure consistent action throughout a long life.

Max. Rating — 10 Amperes, Non-Inductive Load.
Standard Voltages — 6, 12, 24, 32, 64, 110, 220, 440 and 550 volts.
Standard Frequencies — 60, 50 and 25 cycles.



Type C



Type B

Prices

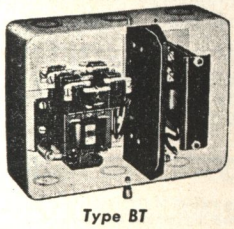
No. of Poles	Contacts N.O.	Contacts N.C.	OPEN Type No.	OPEN Price	ENCLOSED Nema Type 1 General Purpose Type No.	ENCLOSED Nema Type 1 General Purpose Price	ENCLOSED Nema Type 4 Water-tight ①	ENCLOSED Nema Type 7 Class 1, Group D ①
2	2	0	C-200	$13	C-20	$16	$33	$69
	1	1	C-110	16	C-11	19	36	72
	0	2	C-020	16	C-02	19	36	72
3	3	0	B-300	16	B-30	19	52	72
	2	1	B-210	19	B-21	22	55	75
	1	2	B-120	19	B-12	22	55	75
3	0	3	B-030	$19	B-03	$22	$55	$75
4	4	0	B-400	17	B-40	20	53	73
	3	1	B-310	20	B-31	23	56	76
	2	2	B-220	20	B-22	23	56	76
	1	3	B-130	20	B-13	23	56	76
	0	4	B-040	20	B-04	23	56	76

① The listed "Type No." is for the relay enclosed in the Nema Type 1 enclosure. For the same relay in a watertight Nema Type 4 enclosure append the numeral 4; similarly, the Nema Type 7 enclosure appends the numeral 7.

Overlap Contacts—Type B relays can be supplied with overlap contacts (normally open contact closes before normally closed contact opens) at an extra charge of **$4.50** list per set of such contacts.

Discount Schedule A

Types BA-BT-BAT-BM-BXL-CL-D — For Special Purposes



Type BT

Type BA — Designed to relieve the contacts of a three wire gauge type thermostat from breaking the coil current.

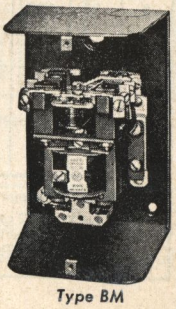
Type BT & BAT — Equipped with a built-in transformer when reduced control circuit voltage is necessary.

Type BM — A "permanent magnet" type coil arrangement assures extra quiet operation.

Type BXL — A mechanical latch assures extra quiet operation.

Type CL — Designed for use where low operating coil currents are necessary.

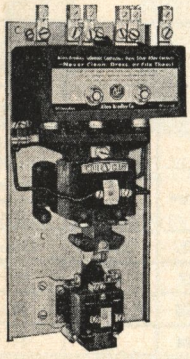
Type D — Extra heavy contacts for use where higher rating is required.



Type BM

For Complete Information Refer to Allen-Bradley Handy Catalog

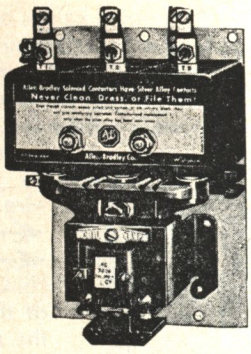
ALLEN-BRADLEY—A.C. Contactors



Bulletin 704, Size 2, 3 Pole.

Bulletin 702 Contactors — The Bulletin 702 contactors are designed to provide continuous trouble free operation — automatically opening and closing alternating current circuits under all kinds of service and operating conditions. They are used to control heating loads, motor control circuits, large lighting installations, and wherever a magnetically operated contactor is required.

Bulletin 704 Mechanically Held Contactors — The Bulletin 704 mechanically held contactors are similar to the Bulletin 702 except that a mechanical latch is provided to latch the contactor in the closed position. An auxiliary solenoid releases the latch when the contactor is to open. These contactors are ideal for installations where hum-free contactors are essential such as on hospital lighting loads, auditorium lighting loads, etc.



Bulletin 702, Size 3, 3 Pole.

Prices

600 Volts Maximum • 60, 50, 25 Cycles

Prices—Prices do not include push button stations.

50 and 25 Cycle Contactors—The catalog numbers listed below are for 60 cycle contactors. Listed prices also apply to 50 and 25 cycle contactors. When ordering contactors for use on 50 or 25 cycles, substitute the letter "W" for the third letter in the catalog number as listed below and then specify the voltage and frequency on which the contactor is to operate.

Coil Clearing Contact—The Bulletin 704 mechanically held contactors are supplied with continuous duty operating coils. When these contactors are used with maintained contact pilot devices, the coils will remain energized. If the coils are not to remain energized, coil clearing auxiliary contacts must be supplied at the price additions shown below.

Coil clearing contacts price additions — Size 1, **$6**; Size 2, **$8**; Size 3, **$10**; Size 4, **$12.**

Size	Ampere Rating 8 Hour ❶ Enc.	Ampere Rating 8 Hour ❶ Open	Ampere Rating Incandescent Lamp Load	No. of Poles ❷	BULLETIN 702 Catalog No. 60 Cycles 110 V	220 V	440 V	550 V	Price	BULLETIN 704 Catalog No. 60 Cycles 110 V	220 V	440 V	550 V	Price
0 ❷	13	15	8	1	702AAD91	702AAA91	702AAB91	702AAC91	$ 25	—	—	—	—	—
				2	AAD92	AAA92	AAB92	AAC92	28	704AAD921	704AAA921	704AAB921	704AAC921	$ 39
				3	AAD93	AAA93	AAB93	AAC93	31	AAD931	AAA931	AAB931	AAC931	42
				4	AAD94	AAA94	AAB94	AAC94	39	AAD941	AAA941	AAB941	AAC941	44
1 ❷	22	25	12	1	702BAD91	702BAA91	702BAB91	702BAC91	30	—	—	—	—	—
				2	BAD92	BAA92	BAB92	BAC92	33	704BAD921	704BAA921	704BAB921	704BAC921	68
				3	BAD93	BAA93	BAB93	BAC93	36	BAD931	BAA931	BAB931	BAC931	72
				4	BAD94	BAA94	BAB94	BAC94	44	BAD941	BAA941	BAB941	BAC941	80
2	45	50	30	2	702CAD92	702CAA92	702CAB92	702CAC92	68	704CAD921	704CAA921	704CAB921	704CAC921	104
				3	CAD93	CAA93	CAB93	CAC93	72	CAD931	CAA931	CAB931	CAC931	108
				4	CAD94	CAA94	CAB94	CAC94	90	CAD941	CAA941	CAB941	CAC941	128
3	90	100	60	2	702DAD92	702DAA92	702DAB92	702DAC92	112	704DAD921	704DAA921	704DAB921	704DAC921	146
				3	DAD93	DAA93	DAB93	DAC93	120	DAD931	DAA931	DAB931	DAC931	154
				4	DAD94	DAA94	DAB94	DAC94	148	DAD941	DAA941	DAB941	DAC941	184
4	135	150	120	2	702EAD92	702EAA92	702EAB92	702EAC92	264	704EAD921	704EAA921	704EAB921	704EAC921	374
				3	EAD93	EAA93	EAB93	EAC93	282	EAD931	EAA931	EAB931	EAC931	422
				4	EAD94	EAA94	EAB94	EAC94	376	—	—	—	—	—

❶ Use these ratings for resistance heating, fluorescent lighting and solenoids.

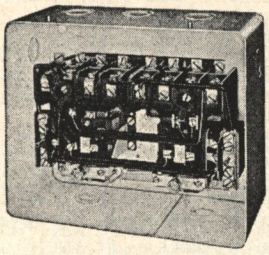
❷ All Bulletin 702 contactors are supplied with a N.O. auxiliary contact for use as a holding contact on 3-wire push button control. The rating of the auxiliary contact on the sizes 00, 0, and 1 contactor is the same as the switching poles. If this auxiliary contact is not desired on these sizes use the contactor with one less switching pole. The auxiliary contact on sizes 2 and above is rated 10 amps at 600 volts. No deduction from the listed prices will be made for its omission.

Discount Schedule A

For Complete Information Refer to Allen-Bradley Handy Catalog

ALLEN-BRADLEY—Reversing Switches

MAGNETIC Bulletin 705 Full Voltage Reversing Starters



Bulletin 705 reversing starters are used for across-the-line starting and reversing of polyphase motors. They consist of "forward" and "reverse" contactors mounted in one enclosure. When the "forward" contactor is closed, the motor leads are connected so that the motor runs in the forward direction. Closing the "reverse" contactor interchanges two of the motor leads causing the motor to run in the opposite direction. The two contactors have mechanical and electrical interlocks to prevent both from closing at the same time. Bulletin 705 reversing starters are available either with or without overload relays. When overload relays are used, they are the Bulletin 815 solder ratchet type. Listings for starters without overload relays can be found in the Allen-Bradley Handy Catalog. Listings for two phase, four wire and single phase operation can also be found in the Handy Catalog.

Prices

Size	Volts	Maximum Horsepower	Nema Type 1 General Purpose	Nema Type 4 Watertight Weatherproof	Nema Type 7 Class 1, Group D Locations	Nema Type 12 Dust-Tight Ind. Use ❶
		3 Ph. and 2 Ph.	3 Ph. 2 Ph., 3 W.	3 Ph, 2 Ph., 3 W.	3 Ph. 2 Ph., 3 W.	3 Ph. 2 Ph., 3 W.
00	110 208–220 440–550	¾ 1 1	$ 72	$118	Use Size 0	Use Size 0
0	110 208–220 440–550	1½ 2 3	84	130	$242	$102
1	110 208–220 440–550	3 5 7½	96	160	256	114
2	110 208–220 440–550	7½ 15 25	184	288	452	214
3	110 208–220 440–550	15 30 50	305	459	785	371
4	208–220 440–550	50 100	724	996	—	826

Prices Include—Two Type N heater elements at **$1.50** list each.
❶ Also suitable for Nema type 5 applications.

Discount Schedule A

The Bulletin 705 is controlled by a three button control station or other suitable pilot device.

Bulletin 706-707 A.C. Combination Reversing Starters

These starters combine a reversing starter and a manual disconnect switch or circuit breaker in the same enclosure in order to make a more compact and better appearing installation and also to take advantage of the safety features. Bulletin 706 has a fusible or non-fusible disconnect switch, while the Bulletin 707 has a circuit breaker. Bulletin 706 and 707 have front operating levers which are mechanically interlocked with the disconnect switch or circuit breaker to prevent opening of the cover when the switch is energized. This safety feature provides protection against exposure to live parts.

MANUAL Bulletin 350 Reversing Drum Switches



Size 1

Bulletin 350 reversing drum switches provide manual reversing of 2 and 3 phase squirrel cage motors and certain single phase and D.C. motors.

The interlocks designated as R, K, and PP consist of additional contacts added to the drum switch. They are used in connection with across-the-line starters to provide different forms of no voltage release and no voltage protection. For further details on these interlocks refer to the Allen-Bradley Handy Catalog.

Prices

Maximum H.P. Rating							Size	Style	Type of Interlock	Nema Type 1 General Purpose Enclosure
Sgl. Phase		2 or 3 Phase			D. C.					
110 Volts	208-220 Volts	110 Volts	208-220 Volts	440-550 Volts	115 Volts	230 Volts				
¾	¾	¾	¾	¾	⅛	⅛	00	A	None	$ 11
1	1½	1½	2	2	¼	¼	0	A BR BK BPP	None R K PP	13 27 27 29
1½	3	3	5	7½	2	2	1	B BR BK BPP	None R K PP	33 53 53 57

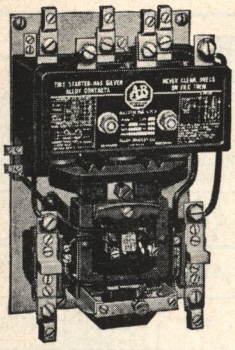
Discount Schedule A

Bulletin 609RS A.C. Manual Full Voltage Reversing Starters

The Bulletin 609RS reversing starter consists of two mechanically interlocked Bulletin 609 across-the-line starters mounted in one enclosure and wired for starting and reversing a.c. polyphase motors. These starters are operated by push buttons which extend through the cover of the enclosure.

For Complete Information Refer to Allen-Bradley Handy Catalog

— ALLEN-BRADLEY — Bulletin 709-709SP A.C. Magnetic Full Voltage Starters —



Bulletin 709, Size 2

Bulletin 709 solenoid starters provide remote or local control for polyphase squirrel cage motors. Any two or three wire pilot device may be used in their control circuits. Reliable overload protection is assured by Bulletin 815 solder ratchet type overload relays.

Bulletin 709SP is a single phase adaption of the standard Bulletin 709. It uses only one overload relay and has a 110/220 dual voltage operating coil.



Form 1

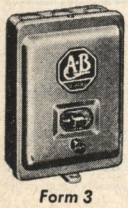
FORMS:

Form 1 is equipped with "Start"-"Stop" push buttons mounted on the front of the starter. Saves time and space when local operation is suitable.



Form 2

Form 2 has no "Start" - "Stop" station included. It can be used with any two-wire or three-wire pilot device such as a push button, pressure switch or limit switch.



Form 3

Form 3 has a "Hand" - "Off" - "Auto" selector switch mounted on the front of the starter. "Hand" by-passes a two-wire pilot device to operate the starter manually.

Bulletin 709 • Prices

3 Phase or 2 Phase, 3 Wire • 600 Volts Maximum • 60, 50, 25 Cycles

Prices Include—Two Type N overload relay heater elements which can be omitted or supplied for **$1.50** list each or **$3.00** list per pair. Prices do not include a push button station.

50 and 25 Cycle Starters—The listed catalog numbers are for 60 cycle starters. Listed prices also apply to 50 and 25 cycle starters. When ordering starters for use on 50 or 25 cycles, substitute the letter "W" for the third letter in the catalog number and then specify the voltage and frequency on which the starter is to operate.

Size	Form	Maximum Horsepower Ratings H.P. Single Phase	Maximum Horsepower Ratings H.P. 3-2 Phase	Volts	Nema Type 1 General Purpose Cat. No. 60 Cycle	Nema Type 1 General Purpose Price	Nema Type 4 Watertight Weather-proof Cat. No. 60 Cycle	Nema Type 4 Watertight Weather-proof Price	Nema Type 7 Class 1—Group D Hazardous Locations Cat. No. 60 Cycle	Nema Type 7 Class 1—Group D Hazardous Locations Price	Nema Type 12 Dust-tight Industrial Use ❶ Cat. No. 60 Cycle	Nema Type 12 Dust-tight Industrial Use ❶ Price	Max. Amps.
0	**Form 1** "Start-Stop" Button in Cover	1 1½ — —	1½ 2 3 3	110 208–220 440 550	709AAD1 AAA1 AAB1 AAC1	**$ 47**	709ACD1 ACA1 ACB1 ACC1	**$ 96**	Use Size 1 Starters		709AJD1 AJA1 AJB1 AJC1	**$ 59**	13.5
	Form 2 With "Reset" Button Only in Cover	1 1½ — —	1½ 2 3 3	110 208–220 440 550	709AAD AAA AAB AAC	**39**	709ACD ACA ACB ACC	**74**	Use Size 1 Starters		709AJD AJA AJB AJC	**51**	
	Form 3 "Hand-Off-Auto" Selector Switch in Cover	1 1½ — —	1½ 2 3 3	110 208–220 440 550	709AAD3 AAA3 AAB3 AAC3	**47**	709ACD3 ACA3 ACB3 ACC3	**96**	Use Size 1 Starters		709AJD3 AJA3 AJB3 AJC3	**59**	
1	**Form 1** "Start-Stop" Button in Cover	1½ 3 — —	3 5 7½ 7½	110 208–220 440 550	709BAD1 BAA1 BAB1 BAC1	**52**	709BCD1 BCA1 BCB1 BCC1	**102**	709BED1 BEA1 BEB1 BEC1	**$179**	709BJD1 BJA1 BJB1 BJC1	**64**	22.5
	Form 2 With "Reset" Button Only in Cover	1½ 3 — —	3 5 7½ 7½	110 208–220 440 550	709BAD BAA BAB BAC	**44**	709BCD BCA BCB BCC	**80**	709BED BEA BEB BEC	**146**	709BJD BJA BJB BJC	**56**	
	Form 3 "Hand-Off-Auto" Selector Switch in Cover	1½ 3 — —	3 5 7½ 7½	110 208–220 440 550	709BAD3 BAA3 BAB3 BAC3	**52**	709BCD3 BCA3 BCB3 BCC3	**102**	709BED3 BEA3 BEB3 BEC3	**179**	709BJD3 BJA3 BJB3 BJC3	**64**	
2	**Form 1** "Start-Stop" Button in Cover	3 7½ — —	7½ 15 25 25	110 208–220 440 550	709CAD1 CAA1 CAB1 CAC1	**92**	709CCD1 CCA1 CCB1 CCC1	**178**	709CED1 CEA1 CEB1 CEC1	**295**	709CJD1 CJA1 CJB1 CJC1	**114**	45
	Form 2 With "Reset" Button Only in Cover	3 7½ — —	7½ 15 25 25	110 208–220 440 550	709CAD CAA CAB CAC	**84**	709CCD CCA CCB CCC	**156**	709CED CEA CEB CEC	**262**	709CJD CJA CJB CJC	**106**	
	Form 3 "Hand-Off-Auto" Selector Switch in Cover	3 7½ — —	7½ 15 25 25	110 208–220 440 550	709CAD3 CAA3 CAB3 CAC3	**92**	709CCD3 CCA3 CCB3 CCC3	**178**	709CED3 CEA3 CEB3 CEC3	**295**	709CJD3 CJA3 CJB3 CJC3	**114**	
3	**Form 2** With "Reset" Button Only in Cover	7½ 15 — —	15 30 50 50	110 208–220 440 550	709DAD DAA DAB DAC	**138**	709DCD DCA DCB DCC	**240**	709DED DEA DEB DEC	**372**	709DJD DJA DJB DJC	**164**	90
4	**Form 2** With "Reset" Button Only in Cover	—	50 100 100	208–220 440 550	709EAA EAB EAC	**308**	709ECA ECB ECC	**482**	709EEA EEB EEC	**608**	709EJA EJB EJC	**394**	135

❶ Also suitable for Nema Type 5 applications.

Bulletin 709SP • Prices

Single Phase • 600 Volts Maximum • 60, 50, 25 Cycles

Prices Include—One Type N overload relay heater element which can be omitted or supplied **$1.50** list each. Listed prices do not include a push button station.

50 and 25 Cycle Starters—The catalog numbers listed below are for 60 cycle starters. Listed prices also apply to 50 and 25 cycle starters. When ordering starters for use on 50 or 25 cycles, substitute for the third letter in the catalog number as listed below, "Z" for 25 cycles and "U" for 50 cycles, and then specify the voltage and frequency on which the starter is to operate.

Size	Form ❶	Maximum Horsepower Ratings 110V	Maximum Horsepower Ratings 220V	Nema Type 1 General Purpose Cat. No. 60 Cycles	Nema Type 1 General Purpose Price	Nema Type 4 Watertight Weather-proof Cat. No. 60 Cycles	Nema Type 4 Watertight Weather-proof Price	Nema Type 7 Class 1, Group D Hazardous Locations Cat. No. 60 Cycles	Nema Type 7 Class 1, Group D Hazardous Locations Price	Nema Type 12 Dust-tight Industrial Use ❷ Cat. No. 60 Cycles	Nema Type 12 Dust-tight Industrial Use ❷ Price	Max. Amps.
0	1	1	1½	709AAT1	**$42**	709ACT1	**$ 91**	Use Size 1		709AJT1	**$54**	13.5
	2	1	1½	AAT	**34**	ACT	**69**			AJT	**46**	
	3	1	1½	AAT3	**42**	ACT3	**91**			AJT3	**54**	
1	1	1½	3	709BAT1	**47**	709BCT1	**97**	709BET1	**$174**	709BJT1	**59**	22.5
	2	1½	3	BAT	**39**	BCT	**75**	BET	**141**	BJT	**51**	
	3	1½	3	BAT3	**47**	BCT3	**97**	BET3	**174**	BJT3	**59**	
1P	1	3	5	709XAT1	**58**	709XCT1	**108**	709XET1	**185**	709XJT1	**70**	—
	2	3	5	XAT	**50**	XCT	**86**	XET	**152**	XJT	**62**	
	3	3	5	XAT3	**58**	XCT3	**108**	XET3	**185**	XJT3	**70**	

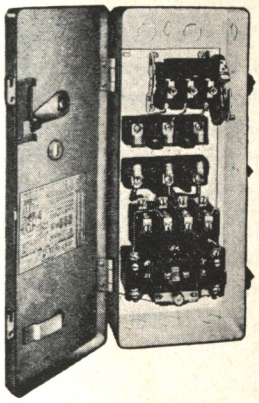
❶ **Form 1** — Starter with "Start-Stop" push button in cover. **Form 2** — Starter with "Reset" button only in cover. **Form 3** — Starter with "Hand-Off-Auto" selector switch in cover.

❷ The Nema Type 12 can also be used for Nema Type 5 applications.

Discount Schedule A

— For Complete Information Refer to Allen-Bradley Handy Catalog —

— ALLEN-BRADLEY — Bulletin 712 Full Voltage Starters with Disconnect Switch —



Bulletin 712 is a combination of a Bulletin 709 full voltage solenoid starter and a heavy duty fusible or non-fusible visible contact disconnect switch mounted in the same cabinet.

Combination starters offer many advantages over separate magnetic starters and disconnect switches. They reduce installation time, save space, improve appearance and provide greater safety.

Bulletin 712 combinations provide trouble free operation and accurate overload protection in the Bulletin 709 component. The double break silver cadmium alloy contacts in the quick make-quick break disconnect switch provide ample interrupting capacity. Protection for the operator is achieved through the interlocked cover which may be padlocked in the "off" position.

Information Required with Orders

1. Catalog number.
2. Motor horsepower.
3. Line voltage.
4. Frequency (cycles).
5. Phase. Number of wires, if 2 phase.
6. Specify heater elements by "Type No." or state full load motor current.
7. State Bulletin and Form Number.
8. State "Type" of enclosure or Nema Type 1 enclosure will be furnished.
9. When ordering Bulletin 712, Form 2F switches state the rating of fuse so that correct fuse clips will be furnished.

Prices

3 Phase or 2 Phase, 3 Wire • 600 Volts Maximum • 60, 50, 25 Cycles

Form 2—With Unfused Disconnect Switch • **Form 2F**— With Fused Disconnect Switch

Prices Include — One pair of Type N overload relay heater elements which can be omitted or supplied at **$3.00** list per pair. Prices do not include a push button station or fuses. Fuse size should be selected in accordance with Article 430 of the National Electrical Code on the basis of the actual current rating of the motor.

50 and 25 Cycle Starters—The listed catalog numbers are for 60 cycle starters. When ordering starters for use on 50 or 25 cycles, substitute the letter "W" for the third letter in the catalog number as listed and then specify the voltage and frequency on which the starter is to operate.

Horizontal Construction—The Nema Type 1 and 12 starters listed are of the vertical construction. Starters in the horizontal construction are also available at a price addition of 25% to the listed prices shown.

Open Type Starters—For open type starters deduct the following from the NEMA Type 1 prices listed in the table: Size 0 & 1 — **$4,** Size 2 — **$11,** Size 3 — **$19,** Size 4 — **$22.**

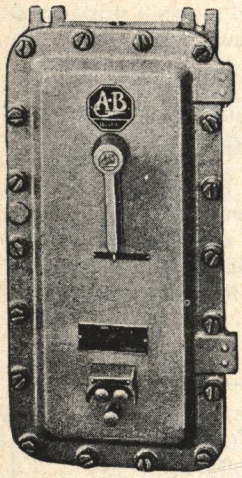
Semi Dust-tight Enclosure—The Nema Type 1 general purpose enclosure can be provided with a cover gasket at the following price additions: Size 0 & 1 — **$10,** Size 2 — **$16,** Size 3 — **$22,** Size 4 — **$38.**

Size	Maximum Horsepower Ratings H.P.	Volts	Fuse Clip Rating Amps.	Nema Type 1 General Purpose Cat. No. 60 Cycle	Price	Nema Type 4 Watertight Weatherproof Cat. No. 60 Cycle	Price	Nema Type 7 Class 1—Group D Hazardous Locations Cat. No. 60 Cycle	Price	Nema Type 12 Dust-tight—Industrial Use Also suitable for Nema Type 5 applications. Cat. No. 60 Cycle	Price	Max. Amps.
0	2	208-220	None	712AAA	$ 83							13.5
			30	AAA24	85							
	3	440	None	712AAB	83	Use Size 1 Starter		Use Size 1 Starter		Use Size 1 Starter		
			30	AAB24	99							
		550	None	712AAC	83							
			30	AAC24	99							
1	5	208-220	None	712BAA	88	712BCA	$184	712BEA	$242	712BJA	$112	22.5
			30	BAA24	90	BCA24	186	—	—	BJA24	114	
			60	BAA25	101	BCA25	197	—	—	BJA25	125	
	7½	440	None	712BAB	88	712BCB	184	712BEB	242	712BJB	112	
			30	BAB24	104	BCB24	200	—	—	BJB24	128	
		550	None	712BAC	88	712BCC	184	712BEC	242	712BJC	112	
			30	BAC24	104	BCC24	200	—	—	BJC24	128	
2	15	208-220	None	712CAA	154	712CCA	302	712CEA	349	712CJA	188	45
			60	CAA25	156	CCA25	304	—	—	CJA25	190	
			100	CAA26	175	CCA26	323	—	—	CJA26	209	
	25	440	None	712CAB	154	712CCB	302	712CEB	349	712CJB	188	
			60	CAB25	162	CCB25	310	—	—	CJB25	196	
			100	CAB26	183	CCB26	331	—	—	CJB26	217	
		550	None	712CAC	154	712CCC	302	712CEC	349	712CJC	188	
			60	CAC25	162	CCC25	310	—	—	CJC25	196	
			100	CAC26	183	CCC26	331	—	—	CJC26	217	
3	30	208-220	None	712DAA	240	712DCA	498	712DEA	565	712DJA	284	90
			200	DAA27	272	DCA27	530	—	—	DJA27	316	
	50	440	None	712DAB	240	712DCB	498	712DEB	565	712DJB	284	
			100	DAB26	252	DCB26	510	—	—	DJB26	296	
			200	DAB27	292	DCB27	550	—	—	DJB27	336	
		550	None	712DAC	240	712DCC	498	712DEC	565	712DJC	284	
			100	DAC26	252	DCC26	510	—	—	DJC26	296	
			200	DAC27	292	DCC27	550	—	—	DJC27	336	
4	50	208-220	None	712EAA	476	712ECA	806	712EEA	926	712EJA	598	135
			400	EAA28	590	ECA28	920	—	—	EJA28	712	
	100	440	None	712EAB	476	712ECB	806	712EEB	926	712EJB	598	
			200	EAB27	512	ECB27	842	—	—	EJB27	634	
			400	EAB28	620	ECB28	950	—	—	EJB28	742	
		550	None	712EAC	476	712ECC	806	712EEC	926	712EJC	598	
			200	EAC27	512	ECC27	842	—	—	EJC27	634	
			400	EAC28	620	ECC28	950	—	—	EJC28	742	

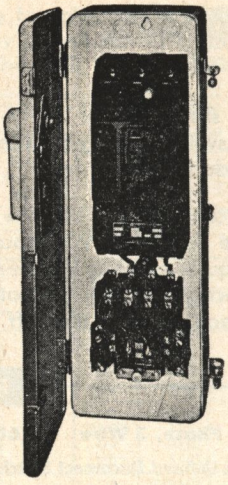
Discount Schedule A

—— For Complete Information Refer to Allen-Bradley Handy Catalog ——

— ALLEN-BRADLEY — Bulletin 713 Full Voltage Starters with Circuit Breaker —



Left: Bulletin 713, Size 1 in Nema Type 7 enclosure for hazardous locations.



Right: Bulletin 713, Size 1 in Nema Type 1 enclosure with door open.

The Bulletin 713 non-reversing starter combines a circuit breaker for line protection and a Bulletin 709 solenoid type full voltage starter for accurate overload protection. Both of these units are mounted in a single compact enclosure. The operating handle, which is located on the front of the starter, prevents access to the interior until the circuit breaker has been turned off. Mounting of both the circuit breaker and the starter in a single enclosure like this, reduces the installation time, saves space, results in a neater job, and provides extra safety.

Prices

3 Phase or 2 Phase, 3 Wire • 600 Volts Maximum • 60, 50, 25 Cycles

Prices Include—Two Type N overload relay heater elements which can be omitted or supplied at **$3.00** list per pair. Listed prices do not include a push button station.

50 and 25 Cycle Starters—The listed catalog numbers are for 60 cycle starters. When ordering starters for use on 50 or 25 cycles, substitute the letter "W" for the third letter in the catalog number as listed and then specify the voltage and frequency on which the starter is to operate.

Horizontal Construction—The Nema Type 1 and 12 starters listed are of the vertical construction. Starters in the horizontal construction are also available at a price addition of 25% to the listed prices shown.

Semi Dust-tight Enclosure—The Nema Type 1 general purpose enclosure can be provided with a cover gasket at the following price additions: Size 0 & 1 — **$10**, Size 2—**$16**, Size 3—**$22**, Size 4—**$38**.

Maximum Current Rating—The starters as used in these combination starters have maximum current ratings as follows: Size 0, 13.5 amperes; Size 1, 22.5 amperes; Size 2, 45 amperes; Size 3, 90 amperes; Size 4, 135 amperes.

Circuit Breaker Interrupting Capacities—Circuit breakers as listed in these combination starters are of the instantaneous trip type with the exception of the E frame which is of the thermal trip type. Interrupting capacities for the circuit breakers are as follows:

208-220 Volts
- E Frame— 7,500 Amperes
- F Frame—20,000 Amperes
- J Frame—25,000 Amperes

440-550 Volts
- F Frame—15,000 Amperes
- J Frame—20,000 Amperes

Max. H. P.	Volts	Size ❶	Circuit Breaker Frame Size	Nema Type 1 General Purpose Catalog No. 60 Cycle	Nema Type 1 Price	Nema Type 4 Watertight Weatherproof Catalog No. 60 Cycle	Nema Type 4 Price	Nema Type 7 Class 1—Group D Hazardous Locations Catalog No. 60 Cycle	Nema Type 7 Price	Nema Type 12 Dust-tight — Industrial Use. The Nema Type 12 is also suitable on Nema Type 5 applications. Catalog No. 60 Cycle	Nema Type 12 Price
1	208-220	0-1	E	713AAA9961	$101	713BCA9961	$202	713BEA9961	$260	713BJA9961	$130
			F	AAA61	130	BCA61	231	BEA61	289	BJA61	159
	440 550	0-1	F	713AAB61 AAC61	130 130	713BCB61 BCC61	231 231	713BEB61 BEC61	289 289	713BJB61 BJC61	159 159
1½	208-220	0-1	E	713AAA9962	101	713BCA9962	202	713BEA9962	260	713BJA9962	130
			F	AAA62	130	BCA62	231	BEA62	289	BJA62	159
	440 550	0-1	F	713AAB62 AAC62	130 130	713BCB62 BCC62	231 231	713BEB62 BEC62	289 289	713BJB62 BJC62	159 159
2	208-220	0-1	E	713AAA9963	101	713BCA9963	202	713BEA9963	260	713BJA9963	130
			F	AAA63	130	BCA63	231	BEA63	289	BJA63	159
	440 550	0-1	F	713AAB63 AAC63	130 130	713BCB63 BCC63	231 231	713BEB63 BEC63	289 289	713BJB63 BJC63	159 159
3	208-220	1	E	713BAA9964	106	713BCA9964	202	713BEA9964	260	713BJA9964	130
			F	BAA64	135	BCA64	231	BEA64	289	BJA64	159
	440 550	0-1	F	713AAB64 AAC64	130 130	713BCB64 BCC64	231 231	713BEB64 BEC64	289 289	713BJB64 BJC64	159 159
5	208-220	1	E	713BAA9965	106	713BCA9965	202	713BEA9965	260	713BJA9965	130
			F	BAA65	135	BCA65	231	BEA65	289	BJA65	159
	440 550	1	F	713BAB65 BAC65	135 135	713BCB65 BCC65	231 231	713BEB65 BEC65	289 289	713BJB65 BJC65	159 159
7½	208-220	2	E	713CAA9966	161	713CCA9966	309	713CEA9966	356	713CJA9966	195
			F	CAA66	190	CCA66	338	CEA66	385	CJA66	224
	440 550	1	F	713BAB66 BAC66	135 135	713BCB66 BCC66	231 231	713BEB66 BEC66	289 289	713BJB66 BJC66	159 159
10	208-220	2	E	713CAA9967	161	713CCA9967	309	713CEA9967	356	713CJA9967	195
			F	CAA67	190	CCA67	338	CEA67	385	CJA67	224
	440 550	2	F	713CAB67 CAC67	190 190	713CCB67 CCC67	338 338	713CEB67 CEC67	385 385	713CJB67 CJC67	224 224
15	208-220	2	E	713CAA9968	161	713CCA9968	309	713CEA9968	356	713CJA9968	195
			F	CAA68	190	CCA68	338	CEA68	385	CJA68	224
	440 550	2	F	713CAB68 CAC68	190 190	713CCB68 CCC68	338 338	713CEB68 CEC68	385 385	713CJB68 CJC68	224 224
20	208-220	3	F	713DAA69	275	713DCA69	533	713DEA69	600	713DJA69	319
	440	2		CAB69	190	CCB69	338	CEB69	385	CJB69	224
	550	2		CAC69	190	CCC69	338	CEB69	385	CJC69	224
25	208-220	3	F	713DAA70	275	713DCA70	533	713DEA70	600	713DJA70	319
	440	2		CAB70	190	CCB70	338	CEB70	385	CJB70	224
	550	2		CAC70	190	CCC70	338	CEC70	385	CJC70	224
30	208-220	3	F	713DAA71	275	713DCA71	533	713DEA71	600	713DJA71	319
	440	3		DAB71	275	DCB71	533	DEB71	600	DJB71	319
	550	3		DAC71	275	DCC71	533	DEC71	600	DJC71	319
40	208-220	4	J	713EAA72	600	713ECA72	930	713EEA72	1050	713EJA72	722
	440	3	F	DAB72	275	DCB72	533	DEB72	600	DJB72	319
	550	3	F	DAC72	275	DCC72	533	DEC72	600	DJC72	319
50	208-220	4	J	713EAA73	600	713ECA73	930	713EEA73	1050	713EJA73	722
	440	3	F	DAB73	275	DCB73	533	DEB73	600	DJB73	319
	550	3	F	DAC73	275	DCC73	533	DEC73	600	DJC73	319
60	440	4	J	713EAB74	600	713ECB74	930	713EEB74	1050	713EJB74	722
	550	4	J	EAC74	600	ECC74	930	EEC74	1050	EJC74	722
75	440	4	J	713EAB75	600	713ECB75	930	713EEB75	1050	713EJB75	722
	550	4	J	EAC75	600	ECC75	930	EEC75	1050	EJC75	722
100	440	4	J	713EAB76	600	713ECB76	930	713EEB76	1050	713EJB76	722
	550	4	J	EAC76	600	ECC76	930	EEC76	1050	EJC76	722

❶ Starters rated up to 2 H.P., 208-220 v., and 3 H.P., 440-550 v. are Size 0 in the Nema Type 1 enclosure and Size 1 in the Nema Types 4, 7, 9, and 12 enclosures.

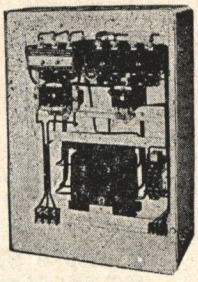
Discount Schedule A

— For Complete Information Refer to Allen-Bradley Handy Catalog —

ALLEN-BRADLEY—Reduced Voltage Starters

MAGNETIC Bulletin 746 Magnetic Autotransformer Type Starters

Bulletin 746 automatic type starters are used for starting polyphase squirrel cage motors on reduced voltage, in order to keep starting currents down to a permissible value. Taps are provided on the autotransformer to adjust the voltage applied to the motor.



Pressing the start button of a separately mounted "start-stop" station closes a contactor which connects the autotransformer to the line and the motor. After the accelerating period a timer operates a contactor which bypasses the autotransformer and connects the motor to full line voltage.

Available in ratings up to 300 hp, 220 volts and 600 hp, 440-550 volts.

Prices

Nema Type 1 — General Purpose Enclosure
3 Phase • 600 Volts Maximum • 60, 50, 25 Cycles
Prices Include—Prices of starters include one pair of overload relay heater elements, which can be omitted or supplied at **$1.50** list each or **$3** list per pair.
Listed prices do not include a push button station.

Max. H.P.	Volts	Catalog No. 60 Cycles	Price	Max. H.P.	Volts	Catalog No. 60 Cycles	Price
10	208–220 440 550	746CAA67 CAB67 CAC67	**$570**	40	208–220 440 550	746EAA72 DAB72 DAC72	**$1296** **722** **722**
15	208–220 440 550	746CAA68 CAB68 CAC68	**570**	50	208–220 440 550	746EAA73 DAB73 DAC73	**1296** **722** **722**
20	208–220 440 550	746DAA69 CAB69 CAC69	**670** **570** **570**	60	440 550	746EAB74 EAC74	**1320** **1320**
25	208–220 440 550	746DAA70 CAB70 CAC70	**670** **570** **570**	75	440 550	746EAB75 EAC75	**1320** **1320**
30	208–220 440 550	746DAA71 DAB71 DAC71	**698**	100	440 550	746EAB76 EAC76	**1320** **1320**

Discount Schedule A

Bulletin 740 Magnetic Resistance Type Starters (With Graphite Resistors)

Bulletin 740 magnetic resistance type starters can be furnished with either one or two steps of starting resistance provided by graphite disc resistors. These resistors are inserted in series with the motor at starting. A fixed value of resistance is used during the entire step, but this value can be adjusted before starting to suit operating conditions. Maximum rating (3 phase) 200 hp at 220, 440, and 550 volts.

Bulletin 741 Multi-Point Resistance Type Starters (With Metallic Resistors)

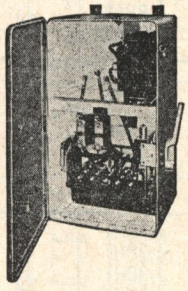
Bulletin 741 starters can have either one, two or three steps of starting resistance provided by metallic resistors. Contactors within the starter cut out certain resistors at definite time intervals, to provide proper acceleration. Ratings start at 125 hp and go up to 300 hp at 220 volts and 600 hp at 440 and 550 volts.

Bulletin 742 Magnetic Stepless Resistance Starters

These starters provide completely automatic and stepless starting for polyphase squirrel cage motors. Starting resistance is provided by graphite disc resistors. Pressure on these resistors is gradually increased by a solenoid and dashpot mechanism, thus decreasing resistance smoothly and bringing the motor up to full speed. Maximum rating 300 hp at 220 volts and 600 hp at 440 and 550 volts.

MANUAL Bulletin 646 Manual Autotransformer Type Starters

Bulletin 646 manual starters are for reduced voltage starting of polyphase squirrel cage motors. The switching mechanism has double break, silver alloy contacts, and each starter is equipped with two Bulletin 815 Manual Reset Thermal overload relays.



When the operating lever is pulled to the "Start" position, a built-in adjustable time delay provides an accelerating period of 0 to 15 seconds before the lever can be thrown from "Start" to "Run". A "Stop" button on the cover opens the contacts to stop the motor. A no-voltage release latch opens the contacts in case of voltage failure. Sizes A, B and C can be furnished for either air break or oil immersed operation. Size D is oil immersed only.

Prices

H. P.	Volts	Size (50-60 Cy.)	Type 1	Type 4, 12 & 9
5-7½-10	220-440-550	A	$ 375	$ 854
15	220-440-550	A	375	854
20-25	220-440-550	A	393	872
30	220-440-550	A	407	886
40	220 440-550	B A	710 429	1480 908
50	220 440-550	B A	710 429	1480 908
60	220 440-550	C B	765	1535
75	220 440-550	C B	765	1535
100	220 440-550	D B	1155 765	— 1535

Prices Include— One pair of Type N heater elements at **$3.00** list per pair.

Discount Schedule A

Bulletin 640 A.C. Manual Resistance-Type Starters

These starters feature graphite compression disc resistors and are used with polyphase squirrel cage motors, where the load must be accelerated very smoothly, or where initial starting current must be kept down. A hand lever is used to compress the discs in the resistors, thus obtaining stepless control of the starting current. At the end of the handle travel a contactor closes, by-passing the resistors, and connecting the motor directly to the line. Maximum rating 200 hp at 220, 440, and 550 volts.

For Complete Information Refer to Allen-Bradley Handy Catalog

ALLEN-BRADLEY — Push Button Stations

strap). Nema Type 4 water-tight and weather-proof stations and Nema Type 7 stations for hazardous locations are available.

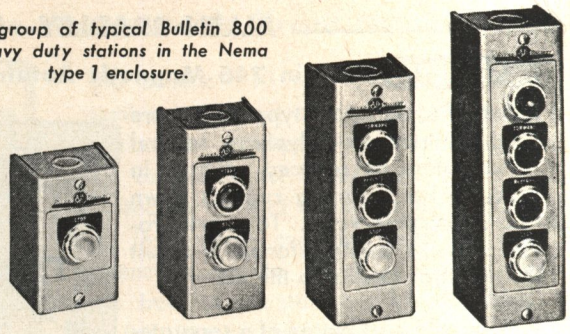
Bulletin 800T Oil-Tight — Bulletin 800T oil-tight control stations are designed for safe, trouble free operating in the presence of oil, coolant and other non-corrosive industrial liquids.

Surface mounted stations have a cast aluminum enclosure sealed with a neoprene gasket. Individual oil-tight units are tightly sealed by one or more neoprene washers. The Nema Type 1B flush mounted Bulletin 800T stations consist of a cover plate and oil-tight units.

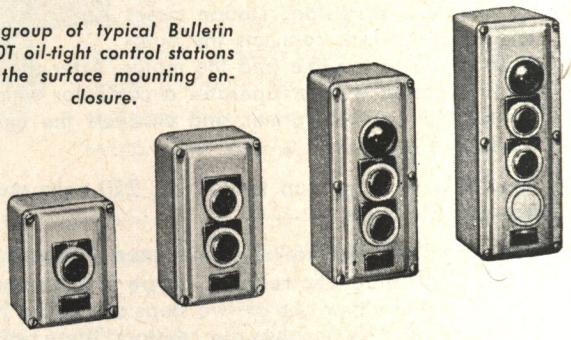
Ratings — Bulletin 800 heavy duty push buttons and Bulletin 800T oil-tight control stations.

A.C.	D.C.
6 amp., 110 v.	1.0 amp., 115 v.
3 amp., 220 v.	0.5 amp., 230 v.
1.5 amp., 440 v.	0.2 amp., 550 v.
1.2 amp., 550 v.	

A group of typical Bulletin 800 heavy duty stations in the Nema type 1 enclosure.



A group of typical Bulletin 800T oil-tight control stations in the surface mounting enclosure.



Bulletin 800—Heavy Duty

Symbol	Nema Type 1 General Purpose		Nema Type 4 Watertight Dust-Tight		Nema Type 7 Class 1, Group D Class 2, Groups E, F, G		Nema Type 1B Flush Mounting ③	
	Type No.	Price	Type No.	Price	Type No.	Price	Type No.	Price
	1HA1		1HA41		1HA71		1AH1	
	1HB1 1HJ1 1HG1	$11	1HB41 1HJ41 1HG41	$23	1HB71 1HJ71 1HG71	$27	1BH1 1JH1 1GH1	$11
	R2HA1 R2HC1 R2HK1	14	R2HA41 R2HC41 R2HK41	26	R2HA71 R2HC71 R2HK71	30	RH2A1 RH2C1 RH2K1	14
	R4HA1 R4HB1	14	R4HA41 R4HB41	26	R4HA71 R4HB71	30	RH4A1 RH4B1	14
	2HA1		2HA41		2HA71		2AH1	
	2HB1 2HC1 2HD1 2HF1	17	2HB41 2HC41 2HD41 2HF41	26	2HB71 2HC71 2HD71 2HF71	30	2BH1 2CH1 2DH1 2FH1	17
	3HA1 3HB1 3HC1 3HD1 3HF1	22	3HA41 3HB41 3HC41 3HD41 3HF41	44	3HA71 3HB71 3HC71 3HD71 3HF71	58	3AH1 3BH1 3CH1 3DH1 3FH1	22
	3HR1	26.50	3HR41	48.50	3HR71	62.50	3RH1	26.50
	3HP1	27	3HP41	49	3HP71	63	3PH1	27
	3HY1	30.50	3HY41	52.50	3HY71	66.50	3YH1	30.50
	3HV1	30.50	3HV41	52.50	3HV71	66.50	3VH1	30.50

Bulletin 800T—Oil-tight

Symbol	Surface Mounting		Flush Mounting ③	
	Type No.	Price	Type No.	Price
	1TA		1AT	
	1TB 1TJ 1TG	$19	1BT 1JT 1GT	$15
	R2TA R2TC R2TK	20	RT2A RT2C RT2K	16
	R4TA R4TB	20	RT4A RT4B	16
	2TA		2AT	
	2TB 2TC 2TD 2TF	26	2BT 2CT 2DT 2FT	21
	3TA 3TB 3TC 3TD 3TF	36	3AT 3BT 3CT 3DT 3FT	31
	3TR	41	3RT	36
	3TP	41	3PT	36
	3TY	42.50	3YT	37.50
	3TV	42.50	3VT	37.50

Locking Attachments — A padlocking attachment can be added to the Bulletin 800 standard duty push button stations in the Nema Type 1 and flush mounting constructions to permit padlocking the "Stop" button in the depressed position. A padlocking attachment is not available for selector switches.

Padlocking Attachment, Catalog Number 800N1 ..... **$3.00**

The Nema Type 4 and 7 push button stations are supplied as standard with provisions for locking the "Stop" button.

A padlocking attachment is also available for the Bulletin 800 heavy duty and the Bulletin 800T oiltight push button units. Refer to Handy Catalog for catalog number and price of these padlocking attachments.

Discount Schedule A

For Complete Information Refer to Allen-Bradley Handy Catalog

ALLEN-BRADLEY — Push Button Stations

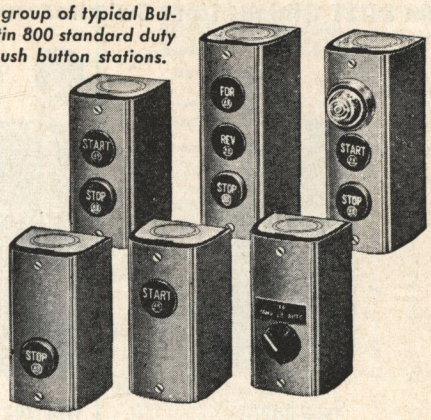
Bulletin 800 Standard Duty — The Bulletin 800 standard duty push buttons in the Nema Type 1 construction have been designed for greater operating flexibility and ease of wiring. The cover now contains the entire contact mechanism; the wiring terminals are located in the base. Spring type, silver plated contacts connect the two assemblies. This unique construction will speed up installation and maintenance.

Nema Type 4 water-tight and weather-proof stations and Nema Type 7 stations for hazardous locations are available. They feature aluminum or cast iron construction with a one-piece contact mechanism. Nema Type 4 is fitted with a cover gasket; Nema Type 7 has a machined flange. Conduit entrance hubs are supplied at the bottom as standard. Mounting feet are provided at the top and bottom.

A.C. Rating	D.C. Rating
3 amperes, 110 volts	1 ampere, 115 volts
2 amperes, 220 volts	0.5 ampere, 230 volts
1 ampere, 440-550 volts	0.2 ampere, 550 volts

Bulletin 800 Heavy Duty—Bulletin 800 heavy duty push buttons are a rugged, yet attractive line of

A group of typical Bulletin 800 standard duty push button stations.



modern pilot controls consisting of push button, selector switch and pilot light units.

The Nema Type 1 general purpose enclosure has a steel base and a steel wrap-around cover that fits tightly to exclude dirt and dust. Nema Type 1B flush mounted stations have a flat cover and a mounting strap. Individual units are mounted on the base (or

No. of Units	Type of Units	Marking	Symbol	Bulletin 800 — Standard Duty							
				Nema Type 1 General Purpose		Nema Type 4 Watertight Dust-tight		Nema Type 7 Class 1, Group D Class 2, Groups E, F, G		Nema Type 1B Flush Mounting ③	
				Type No.	Price	Type No.	Price	Type No.	Price	Type No.	Price
1	One Push Button	Stop		1SA1	$6	1SA41	$19	1SA71	$23	1AS	$7.50
		Start		1SB1	6	1SB41	19	1SB71	23	1BS	7.50
		Jog		—	—	—	—	—	—	—	—
		Reset		—	—	—	—	—	—	—	—
	2 Position Selector Switch	Hand-Auto				—		—		RS1A	7.50
		Off-On		R1SX1 ②	6	—		—		RS1C	7.50
		Jog-Run				—		—		—	—
	3 Position Selector Switch	Hand-Off-Auto				—		—		RS4A	
		For-Off-Rev		R4SX1 ②	6	—		—		RS4B	7.50
2	Two Push Buttons	Start-Stop		2SA1	6	2SA41	19	2SA71	23	2AS	7.50
		For-Rev		2SB1		2SB41		2SB71		2BS	
		Up-Down		2SC1	7.50	2SC41	19	2SC71	23	2CS	9
		Raise-Lower		2SD1		2SD41		2SD71		2DS	
		Open-Close		2SF1		2SF41		2SF71		2FS	
3	Three Push Buttons	For-Rev-Stop		3SA1		—	—	—	—	3AS	
		Raise-Lower-Stop		3SB1		—	—	—	—	3BS	
		Up-Down-Stop		3SC1	12	—	—	—	—	3CS	13
		Open-Close-Stop		3SD1		—	—	—	—	3DS	
		Fast-Slow-Stop	①	3SF1		—	—	—	—	3FS ①	
	Two Push Buttons One Pilot Light	Start-Stop (110 Volt)		3SR1		—	—	—	—	3RS	
		Start-Stop (220 Volt)		3SP1	22	—	—	—	—	3PS	23
		Start-Stop (440 Volt, 60 Cycles)		—		—	—	—	—	—	
		Start-Stop (550 Volt, 60 Cycles)		—		—	—	—	—	—	

① Contact mechanism as used on the 3 unit Type 1B flush mounting stations has two buttons having normally open contacts only and the third button with a normally closed contact only.

② Use the two position selector switch for three position applications. The two position selector switch is arranged so that it can be changed to three position in the field. Instructions regarding this change are included in the cover of the selector switch.

Packed with each R1SX1 and R4SX1 selector switch are adhesive backed metal nameplates having the following markings: "Hand-Auto," "For.-Rev.," "Off-On," "Open-Close," "Hand-Off-Auto," "For.-Off-Rev.," "Open-Off-Close." The required nameplate can be readily applied in the field.

③ A back-of-panel enclosure is not included.

Discount Schedule A

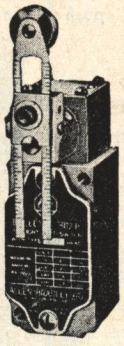
For Complete Information Refer to Allen-Bradley Handy Catalog

ALLEN-BRADLEY—Limit Switches

Bulletin 802T Oiltight Limit Switches



Type 802TA



Type 802TG



Type 802TB



Type 802TC

The Bulletin 802T oiltight limit switches are designed for use on modern high-speed production machines where oil or coolant would prevent the use of standard limit switches. Ruggedly built, yet compact and streamlined in appearance, the Bulletin 802T limit switches are ideally suited for applications such as automatic screw machines, lathes, and other types of industrial machines.

The operating heads are die castings containing all the operating mechanism except the contact block. All operating heads are interchangeable. The oiltight seal between the operating head and the switch body is obtained by means of a synthetic rubber gasket. Contact block is easily replaced as a unit. Refer to nearest sales office for information on other types of limit switches.

Prices

A. C. RATINGS { 6 Amperes, 110 Volts; 3 Amperes, 220 Volts; 1.5 Amperes, 440 Volts; 1.2 Amperes, 550 Volts

D. C. RATINGS { 0.4 Ampere, 115 Volts; 0.2 Ampere, 230 Volts; 0.1 Ampere, 550 Volts

Type of Head	Description			Operating Head Only		Contact Base Only Type 802T	COMPLETE LIMIT SWITCHES			
							Surface Mounting		Cavity Mounting	
				Type No.	Price		Type No.	Price	Type No.	Price
Roller Lever Spring Return	Maximum Travel to Operate Switch	Maximum Travel	Direction of Lever Travel to Operate Switch							
	20° ± 2°	45°	Right or Left	A	$5	$11	802TA	$16	802TA0	$15
			Right	A1	5	11	802TA1	16	802TA10	15
			Left	A2	5	11	802TA2	16	802TA20	15
Adjustable Roller Lever Spring Return	20° ± 2°	45°	Right or Left	G	6	11	802TG	17	802TG0	16
			Right	G1	6	11	802TG1	17	802TG10	16
			Left	G2	6	11	802TG2	17	802TG20	16
Top Push Rod Spring Return	Maximum travel of rod 5/16". Maximum of 5/64" travel to operate switch.			B	5	11	802TB	16	—	—
Side Push Rod Spring Return	Maximum travel of rod 1/4". Approximately 3/32" travel to operate switch.			C	6	11	802TC	17	802TC0	16
Roller Lever Maintained Contact	Lever has 90° throw. Contacts operate at mid-point of travel.			AM	8	11	802TAM	19	802TAM0	18
Adjustable Roller Lever Maintained Contact	Lever has 90° throw. Contacts operate at mid-point of travel.			GM	9	11	802TGM	20	802TGM0	19

Discount Schedule A

For Complete Information Refer to Allen-Bradley Handy Catalog

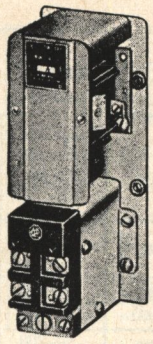
ALLEN-BRADLEY—Timing Relays

Bulletin 849 — Pneumatic Timing Relays

A simple solenoid actuated timer with a range of ⅛ sec. to 3 min. Timing is controlled by air flow through an adjustable valve. Adjustment is made easily from the front. All styles are available as "on-delay" or "off-delay" and can be changed in the field from one to the other.

Contacts have pilot duty ratings.

All five basic styles can be equipped for additional functions as listed in the modification table. Add modification price to the basic price. And add Catalog Code No. to the basic Catalog No.



Style A "On-delay" Timer

Modifications

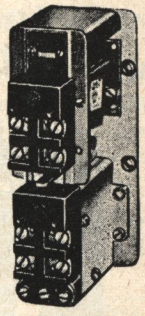
Style Letter	Description	Catalog Code No.	Price Addition
D	Dial indicator on timing mechanism.	2	$ 5
M	Maintained contact timing unit.	5	10
X	One set instantaneous auxiliary contacts.	1	5
XX	Two sets instantaneous auxiliary contacts.	7	10
DX	Dial indicator on timing mechanism and one set instantaneous auxiliary contacts.	3	10
DXX	Dial indicator on timing mech. and two sets instantaneous auxiliary contacts.	4	15
MX	Maintained contact unit and one set instantaneous auxiliary contacts.	6	20

Prices

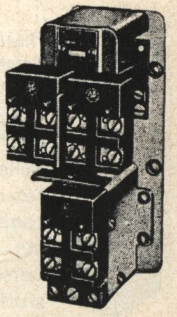
Power	Style Number	Volts	Nema Type 1 General Purpose Catalog No. 60 Cycle	Price	Nema Type 4 Water-tight Weatherproof Catalog No. 60 Cycle	Price	Nema Type 7 Class 1, Group D Hazardous Locations Catalog No. 60 Cycle	Price	Nema Type 1B Flush ② Mounting Catalog No. 60 Cycle	Price	Open Type Catalog No. 60 Cycle	Price
A.C.	Style A Standard "On-Delay"①	110 220 440 550	849ZAD32 ZAA32 ZAB32 ZAC32	$60	849ZCD32 ZCA32 ZCB32 ZCC32	$90	849ZED32 ZEA32 ZEB32 ZEC32	$160	849ZKD32 ZKA32 ZKB32 ZKC32	$58	849ZOD32 ZOA32 ZOB32 ZOC32	$50
	Style B Standard "Off-Delay"②	110 220 440 550	849ZAD33 ZAA33 ZAB33 ZAC33	60	849ZCD33 ZCA33 ZCB33 ZCC33	90	849ZED33 ZEA33 ZEB33 ZEC33	160	849ZKD33 ZKA33 ZKB33 ZKC33	58	849ZOD33 ZOA33 ZOB33 ZOC33	50
	Style H with Two Timing Units "On-Delay"①	110 220 440 550	849ZAD122 ZAA122 ZAB122 ZAC122	128	849ZCD122 ZCA122 ZCB122 ZCC122	188	849ZED122 ZEA122 ZEB122 ZEC122	340	—	—	849ZOD122 ZOA122 ZOB122 ZOC122	112
	Style L with Two Timing Units "Off-Delay"②	110 220 440 550	849ZAD123 ZAA123 ZAB123 ZAC123	128	849ZCD123 ZCA123 ZCB123 ZCC123	188	849ZED123 ZEA123 ZEB123 ZEC123	340	—	—	849ZOD123 ZOA123 ZOB123 ZOC123	112
	Style AB Double Unit "On & Off Delay"	110 220 440 550	849ZAD124 ZAA124 ZAB124 ZAC124	128	—	—	—	—	—	—	849ZOD124 ZOA124 ZOB124 ZOC124	112
D.C.	Style C Standard "On-Delay"①	115 230	849ZAG32 ZAH32	65	849ZCG32 ZCH32	95	849ZEG32 ZEH32	165	—	—	849ZOG32 ZOH32	55
	Style D Standard "Off-Delay"②	115 230	849ZAG33 ZAH33	65	849ZCG33 ZCH33	95	849ZEG33 ZEH33	165	—	—	849ZOG33 ZOH33	55

① "On-Delay" provides time delay after the coil is energized.
② "Off-Delay" provides time delay after the coil is de-energized.
③ A back of panel enclosure is available at $6 list.

Discount Schedule A



Style AX



Style AXX

Bulletin 848

Fluid Dashpot Timing Relays



A magnetic type relay, with fluid dashpot for setting the tripping time. Can be used for any application where the sequence of operation requires a reliable, but not exceedingly accurate delay. Adjustable range from 2 seconds to 30 seconds.

Power	Nema Type 1	Nema Type 4	Nema Type 7	Open Type
A. C.	$41	$70	$144	$30
D. C.	43	72	146	32

Bulletin 850

Motor Driven Timing Relays



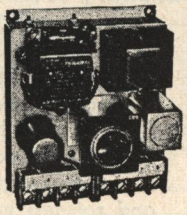
A motor driven timer especially designed for controlling laundry washers and similar equipment where the motor is run for a given period in one direction, reversed, and then run in the opposite direction. Provides 2, 3, 4 or 6 reversals per minute, with adjustable drift time between reversals.

Construction	50-60 Cy.	25 Cy.
Open Type	$31	$44
Nema Type 1 (General Purpose)	43	56

Bulletin 852

Electronic Timing Relays

For applications where an accurate timer for frequent service is required. Has a range of 20 to 1 and is listed in eight timing ranges from one-half second up to two minutes.



		110-220 V. 50-60 Cy.	110-220 V. 25-30 Cy.
Open	Type	$122	$138
Nema	Type 1	124	140

Discount Schedule A

For Complete Information Refer to Allen-Bradley Handy Catalog

ALLEN-BRADLEY—Miscellaneous Items

Bulletin 808 Zero Speed Plugging Switches



The zero speed switch is connected to a shaft on the motor or driven machine. Its contacts are operated when the shaft turns and they return to normal position when the shaft slows down. These switches can be used with a reversing switch to "plug" the motor to a quick stop or can be used to set up circuits when a machine reaches a certain speed. Can be furnished with a built-in lockout relay if required.

Prices

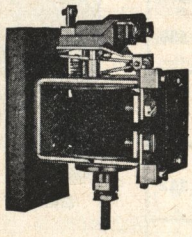
Maximum Ratings { A.C.—5 Amp., 110-220-440-550 Volts; D.C.—0.12 Amp., 115 Volt; 0.08 Amp., 230 Volts

Type of Mounting	Speed Range R.P.M. ①	Without Lockout Relay			With Lockout Relay		
		Catalog No.		Price	Catalog No. ②		Price
		N. O. Contact	N. C. Contact		N. O. Contact	N. C. Contact	
Base	50–200	808C1	808E1		808CL1	808EL1	
	150–900	808D1	808F1		808DL1	808FL1	
Flange (3 Point)	50–200	808C2	808E2	**$112**	808CL2	808EL2	**$125**
	150–900	808D2	808F2		808DL2	808FL2	
Flange (4 Point)	50–200	808C3	808E3		808CL3	808EL3	
	150–900	808D3	808F3		808DL3	808FL3	

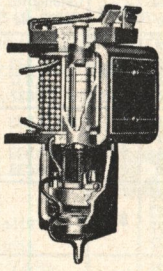
① Speed ranges in this column are the speed at which the contact can be adjusted to operate. They are not the maximum operating speed.
② Specify voltage and frequency when ordering.

Discount Schedule A

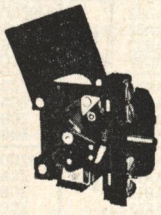
Bulletin 809-810-815-820 Overload Relays



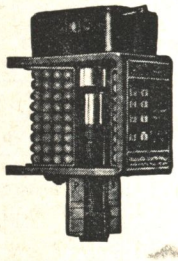
Bulletin 809 — Instantaneous trip current relay. Resets immediately after overload is removed.



Bulletin 810 — Magnetically operated. Provides time delay to prevent unnecessary shutdowns.



Bulletin 815 — Standard solder pot relay. For automatic reset specify Bulletin 816.



Bulletin 820 — A solder pot type relay which is heated by induction.

Rotary Switches



Bulletin 804 Master switches — For control of reversing and non-reversing magnetic starters.



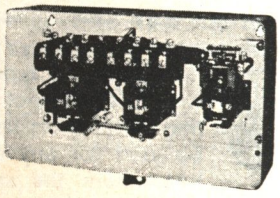
Bulletin 806 Rotary pilot switches —For selection or transfer of control circuits.



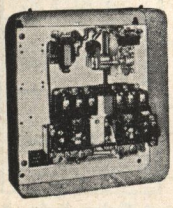
Bulletin 807 Instrument switches — used to switch indicating instruments from one circuit to another or to cut instruments in and out of a circuit.

Bulletin 1270 Automatic Transfer Switches

Bulletin 1270 automatic transfer panels are used to maintain a continuous power supply by automatically switching the load to an auxiliary supply should the normal lines fail. They consist of a main line contactor and auxiliary line contactor and a pilot relay mounted in one enclosure. When normal power fails the main contactor and pilot relay drop out allowing the auxiliary source to energize the auxiliary contactor. Available in ratings up to 600 amps.



Bulletin 1223 Laundry Washer Control



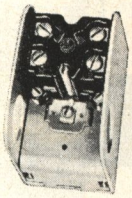
Bulletin 1223 A.C. laundry washer control panels are for use with squirrel cage motors driving industrial washing machines. They control the motor so that the washer cylinder is operated in one direction for a certain length of time; reversed, and rotated in the opposite direction for the same length of time. A dwell period is provided between reversals.

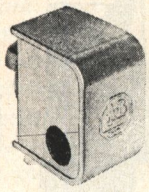
The panels consist of a reversing switch and a Bulletin 850 Type L motor driven laundry timer. Panels can be provided to furnish two, three, four or six reversals per minute and the dwell period between reversals is adjustable.

For Complete Information Refer to Allen-Bradley Handy Catalog

ALLEN-BRADLEY—Pressure, Temperature and Float Switches

Bulletin 830 Pressure Switches





Bulletin 830 pressure switches are for domestic water pumps, air compressors, and other applications requiring a compact, reliable, and inexpensive pressure controls. Bulletin 830 is a rugged two pole switch, which has double break quick make and break contacts. Range and differential are easily adjustable.

Prices

Catalog No.	Pressure Range Lbs.	Pressure Diff. Lbs.	H. P. Ratings: Single Phase 110v.	Single Phase 220v.	Polyphase 110v.	Polyphase 220v.	D. C. 32v.	D. C. 115-230v.	Price
830A2-210	15–60	15–25	1	1	1	1	¼	¼	$6.25
830B2-210	15–80	15–35	1½	2	2	3	¼	½	15.00
830C2-200	50–200	30–60	1½	2	2	3	¼	½	15.00
830C2-204①	50–200	30–60	1½	2	2	3	¼	½	20.70

① The Catalog No. 830C2-204 pressure switch is equipped with a 2 way release valve.

Note: ¼" inside pipe tap is the standard. Only when ordered in large quantities, other sizes of pipe taps, as well as compression fittings can be furnished.

Discount Schedule C

Bulletin 836 Pressure Controls and Bulletin 837 Temperature Controls

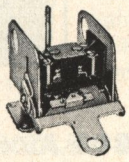
Bulletin 836 and 837 controls are adaptable to a wide variety of pressure and temperature applications. Bulletin 836 is for use with non-corrosive liquids, vapors, and gases. Bulletin 837 is of the vapor pressure type and is available with special bulb metals for corrosive vapors or liquids.

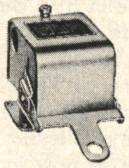
The principle of operation for both the pressure and temperature control is the same. A metal bellows is expanded and throws a precision switch when the setting is reached. Temperature controls are exactly like the pressure control except that a closed bulb is added to generate pressure accurately proportional to the temperature of the bulb.

Bulletin 840 Float Switches

Bulletin 840 float switches provide automatic control for motors operating tank or sump pumps. Except for the Style D, they can easily be converted from tank to sump operation. Style A, B and D are two pole switches, while Style C has three poles. All styles have snap action double break quick make and break cadmium silver alloy contacts.

These switches are operated by the up and down movement of a copper float which is connected to the switch by a rod or chain, depending upon the type of accessories chosen.





Style D

Prices

Style	Maximum Horsepower Ratings: Single Phase 110 Volt	Single Phase 220 Volt	2 or 3 Phase 110 Volt	2 or 3 Phase 220-440-550 Volt	Direct Current 32 Volt	Direct Current 115 Volt	Direct Current 230 Volt	Prices ①: Nema Type 1 General Purpose	Nema Type 4 Watertight Weatherproof	Nema Type 7 Class 1 Group D Hazardous Locations
A②	1	1	—	—	¼	¼	⅛	$20	$50	$64
B	1½	3	—	2	—	1	1	22	56	70
C	1½	3	3	5	—	2	2	28	68	90
D②	1½	2	2	3	¼	½	½	15	—	—

① Prices do not include the accessories such as float or rod. See Table below for prices on accessories.

② The Style A and D switches have a pilot duty rating of 10 Amperes, 600 Volts max.

Bulletin 840 Mechanical Alternator

Prices

Accessories — Refer to table on the right for prices of various types of accessories that can be used with these Float Switches.

Horsepower Ratings—Same horsepower rating as Bulletin 840 Style D Float Switch.

Nema Type 1 General Purpose	Nema Type 4 Water-tight Weatherproof	Nema Type 7 Class 1, Group D Hazardous Locations
$48	$84	$150

Discount Schedule C

• • • ACCESSORIES • • •

Description	Enclosure Nema Type No.	Catalog Numbers For Accessories: Style A	Style B	Style C	Price
Rod operated, wall mounting—Consists of two 3-ft. lengths of ⅜" brass rod, with necessary couplings, stop collars, and copper float.	1-4-7	840-1A	840-1BC	840-1BC	$22
Rod operated, floor mounting—Consists of mounting bracket, 20" length of 1" pipe, mounting accessories, two 3-foot lengths ⅜" brass rod with couplings, stop collars and copper float.	1	840-2A1	840-2BC1	840-2BC1	36
	4-7	840-2A47	840-2B47	840-2C47	
Chain operated, separate pulleys—Consists of two pulleys for separate mounting, 15 feet of bronze chain, two stop collars, counterweight and copper float.	1-4-7	840-3A	840-3BC	840-3BC	22
Chain operated, self-supported pulleys—Consists of double pulley bracket, 15 foot bronze chain, stop collars, and counterweight and copper float	1	840-4A1	—	—	22
	1	—	840-4B1	840-4C1	25
	4-7	840-4A47	840-4B47	840-4C47	39

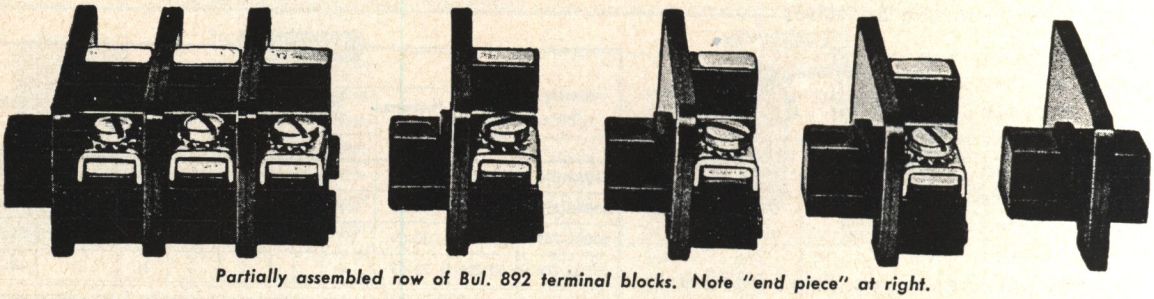
Additional three-foot sections of brass rod with necessary coupling **$1.20** list per length.

Additional bronze chains for the chain operated accessory can be obtained at **$ .40** list per foot.

Discount Schedule C

For Complete Information Refer to Allen-Bradley Handy Catalog

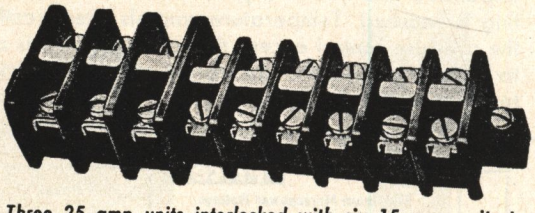
ALLEN-BRADLEY—Bulletin 892 Style A Terminal Blocks



Partially assembled row of Bul. 892 terminal blocks. Note "end piece" at right.

Bulletin 892 Style A Terminal Blocks are individual units made in two sizes. (15-amp or 25-amp) Each is equipped with line and load terminal and white tag for circuit marking.

Units of both sizes interlock with each other to make a continuous strip without brackets, rods, or channels. Complete assembly is held by screw at each end when twelve units or less are used. For more than twelve units or at shorter intervals, when advisable, an anchor unit must be inserted.



Three 25 amp units interlocked with six 15 amp units to form a single assembly.

Prices

Ampere Rating (600V Max.)	Part	Catalog No.	Maximum Wire Size	Quantity ①	Price Each
15	Term Block	892-15T	12	100	$ .40
	End Piece	892-15E	—	25	.17
	Anchor Unit	892-15A	—	10	.17
25 ②	Term Block	892-25T	10	100	$ .45
	End Piece	892-25E	—	25	.20
	Anchor Unit	892-25A	—	10	.20

①Listed prices apply only when quantities are equaled or exceeded.
②25 Ampere terminal blocks can be supplied without the clamp type terminals. Add letter "X" to Catalog No. if wire clamps are to be omitted.

Discount Schedule A

ALLEN-BRADLEY—Bulletin 895 Auxiliary Contacts

Prices

PILOT DUTY RATINGS

	A.C.	D.C.
SIZES 0 & 1	110V 3.0 Amps. 220V 1.5 Amps. 440V 0.75 Amps. 600V 0.60 Amps.	115-125V 1.1 Amps. 230-250V 0.5 Amps. 600V 0.2 Amps.
SIZES 2 & 3	110V 6.0 Amps. 220V 3.0 Amps. 440V 1.5 Amps. 600V 1.2 Amps.	115-125V 2.2 Amps. 230-250V 1.1 Amps. 600V 0.4 Amps.

For use on Starter Size	Construction	Contact Arrangement	Price
0—1	NO	Normally Open	$6
	NC	Normally Closed	
	NONC	Normally Open & Normally Closed	8
2—3	NO	Normally Open	6
	NC	Normally Closed	
	NONC	Normally Open & Normally Closed	8

Maximum Number of Bulletin 895 Auxiliary Contacts That Can Be Mounted on a Starter or Contactor	Starter Size	2 Pole	3 Pole	4 Pole	5 Pole
	0	0	1	2	0
	1	0	1	2	2
	2	1	2	2	—
	3	1	2	2	—

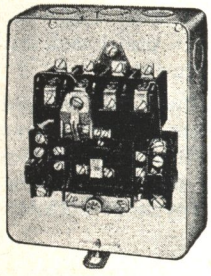
Discount Schedule A

Bulletin 895 auxiliary contacts provide an extra contact of pilot duty rating on contactors or starters of sizes 0 through 3. They can be added to any Allen-Bradley solenoid type contactor or starter now in the field without removing the switch from its enclosure and usually without disturbing any of the existing wiring. Readily accessible terminals insure a quick, easy wiring.

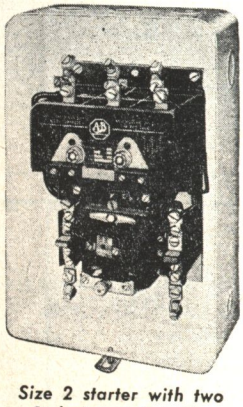
The N.O. or the N.C. device can be reversed in the field.

Bulletin 895, Sizes 0 and 1 auxiliaries are held in place by the terminal screw on the arc hood. Only one unit can be added to a three pole arc hood and a maximum of two can be added to the four or five pole arc hood. When mounted adjacently, these units must be circuits of the same polarity.

Bracket for size 2 and 3 auxiliary terminals fastens to arc hood and will accommodate two units without polarity restrictions.



Size 1 starter with one Style NO Bul. 895.



Size 2 starter with two Style NO Bul. 895's.

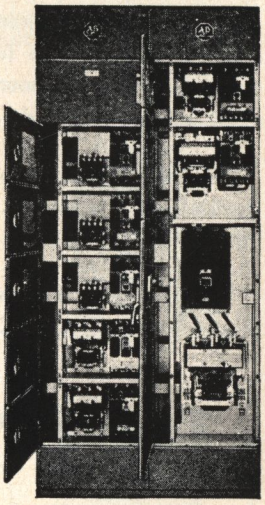
For Complete Information Refer to Allen-Bradley Handy Catalog

ALLEN-BRADLEY—Bulletin 798 Multi Unit Control Centers

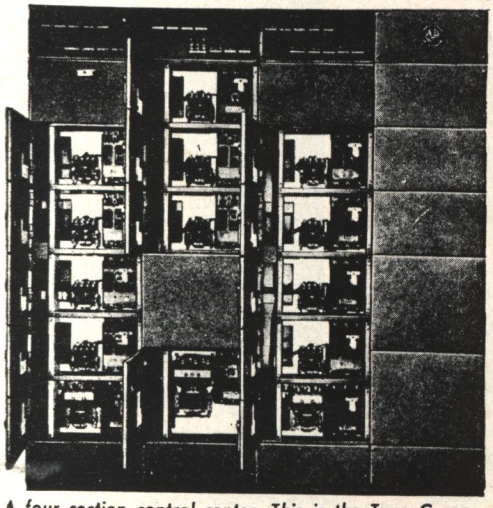
Bulletin 798 multi-unit control centers provide centralized mounting of the controls for a number of motors. They are ideal for applications involving the control of complete processes, groups of machines or single machines having many motors. Advantages include: Centralized Operation, Greater Safety, Lower Installation and Maintenance Cost, Improved Appearance, and Adaptability to Changes.

Each control center is an assembly of control units complete with interwiring, if specified, and line-side bus. The result is an entirely enclosed dead-front, floor mounted switch board ready for connection to motors in your plant.

There are two basic constructions: One provides fixed connection units and the other provides plug-in units. Terminal connections for the units are available in three types: Type A — Direct to starter units; Type B — To terminal blocks in each starter unit; Type C — To master terminal blocks at top or bottom of each section. The standard height of a control center is 90" and the depth is 12" for plug-in construction and 20" for fixed connection construction. Each vertical section is 20" wide.



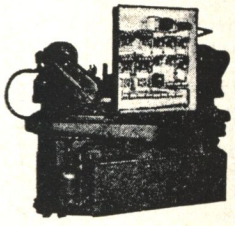
Two section control center with starters and circuit breakers.



A four section control center. This is the Type C construction (note terminals at top).

Equipment which can be installed as control center units includes: Across-the-line, reversing and multispeed combination starters with disconnect switch or circuit breaker; Reduced voltage starters; main line circuit breakers, fusible disconnect switches, lighting panels and lighting transformers; push buttons, selector switches, pilot lights, etc., auxiliary contacts, control relays, control transformers and special assemblies.

ALLEN-BRADLEY—Special Control Panels



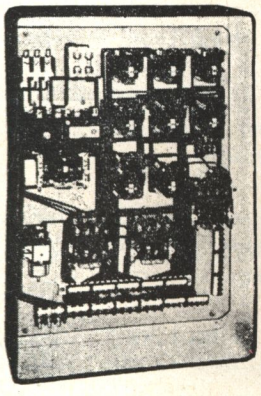
Special control panel installed on a machine tool.

For modern multi-motored machines it is advantageous to combine starters, relays and other control units on large panels so that all controls are located in a single place. A panel such as this may then be installed in the machine base or in a cabinet mounted on or near the machine. If a cabinet is used it can be any of several types: Nema Type 1, general purpose, Nema Type 4, watertight and weatherproof, Nema Type 12, dust-tight and industrial use.

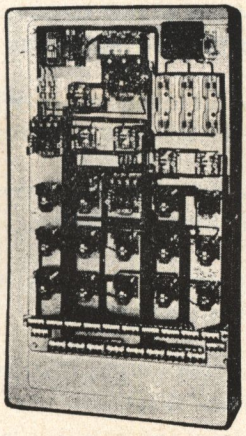
The small size and compact construction of Allen-Bradley solenoid operated equipment makes it ideally suited for the construction of panels of this type. All wiring is accessible from the front and all components of the panel can be removed without taking the panel from its enclosure. Terminal blocks are supplied where required.

Allen-Bradley field engineers at any Allen-Bradley district office are fully qualified to assist in the planning of special control panels.

A single control panel eliminates the need of complicated and costly interconnection of the separate items it contains.

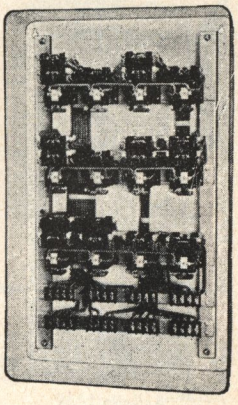


A 12-unit machine tool control panel.



This master control panel operates a nine position motor driven turn head.

Complicated machine operations of all types can be handled with A-B panels.



For Complete Information Refer to Allen-Bradley Handy Catalog

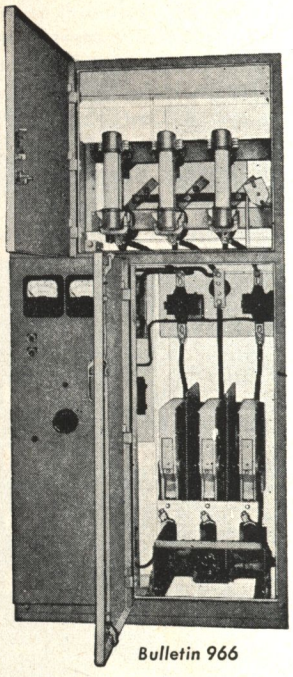
A-8169-P

ALLEN-BRADLEY—Synchronous Motor Starters

Allen-Bradley synchronous starters are designed to start any synchronous motor. They are fully enclosed and have push buttons and D.C. and A.C. Ammeters mounted in the door of the enclosure. Space is also provided in case a field rheostat is to be mounted on the door.

Low voltage synchronous starters use solenoid contactors having double break, air-break, silver to silver contacts. The high voltage starters have either oil-immersed or air-break switching.

These synchronous motor starters consist essentially of a starter plus full automatic D.C. field control equipment all fully enclosed.



Bulletin 966

Low Voltage—600 Volts Maximum

Bulletin 906 — Full voltage starter.

Bulletin 914 — Reduced voltage starter — resistance type.

Bulletin 922 — Reduced voltage starter — autotransformer-type.

High Voltage—5000 Volts Maximum

High voltage synchronous starters are standard with current limiting fuses, but they can also be supplied without the current limiting fuses.

Bulletin 936 — Full voltage starter with oil-immersed switching.

Bulletin 966 — Full voltage starter with air-break switching.

Bulletin 952 — Reduced voltage starter — autotransformer-type — with il-immersed switching.

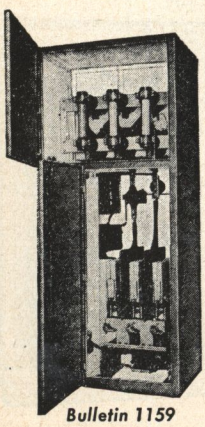
Bulletin 953 — Reduced voltage starter — reactor type — with oil-immersed switching.

Bulletin 983 — Reduced voltage starter — reactor type — with air-break switching.

ORDERING INSTRUCTIONS

1 — Motor Manufacturer's name. **2** — Serial Number of Motor. **3** — Horsepower. **4** — KVA. **5** — Voltage. **6** — RPM. **7** — Power Factor. **8** — Full Load Amperes. **9** — Phases. **10** — Frequency. **11** — Rated Field Voltage. **12** — Normal Excitation Amperes. **13** — Maximum Excitation Amperes. **14** — Induced Field Amperes with Full Voltage Applied to Stator at Zero Speed, 50% Speed, and 95% Speed. **15** — Recommended Ohmic Value for Field Discharge Resistor. **16** — Percent KVA Inrush, Locked Rotor, Full Voltage. **17** — Maximum allowable time on Cage Winding, Locked Rotor, Full Voltage, without injury to Cage. **18** — Timer required to accelerate Motor from Zero to Synchronous Speed. **19** — At what percent of Synchronous Speed is Field to be Applied. **20** — Application.

ALLEN-BRADLEY—High Voltage Induction Motor Starters



Bulletin 1159

Starters consist of one or two contactors, two Bulletin 820 overload relays with current transformers, and three current limiting fuses all mounted in a Nema Type 1 enclosure.

Bulletin 1109—Full voltage non-reversing starter with oil-immersed switching.

Bulletin 1159—Full voltage non-reversing starter with air-break switching.

Bulletin 1105 — Full voltage reversing starter with oil-immersed switching.

Bulletin 1155 — Full voltage reversing starter with air-break switching.

Bulletin 1121 — Reduced voltage starter — autotransformer-type — with oil-immersed switching.

Bulletin 1122 — Reduced voltage starter — reactor type — with oil-immersed switching.

Bulletin 1172 — Reduced voltage starter — reactor type — with air-break switching.

For Complete Information Refer to Allen-Bradley Handy Catalog

QO CIRCUIT BREAKER LOAD CENTERS

1-12 CIRCUITS

NO DOOR — **ORDER BREAKERS SEPARATELY**

Maximum Number Poles	Mains Ratings Amps.	Type Enclosure	Description	Box, Interior and Cover Catalog No.	List
2	30	Surface	General Purpose	QO2S	$ 3.00
		Flush	General Purpose	QO2F	3.60
		Raintight	1¼" Max. Hub	QO2RO	8.30▲
	70	Surface	General Purpose	QO2AS	5.00
		Flush	General Purpose	QO2AF	5.00
		Raintight	1¼" Max. Hub	QO2ARO	9.50▲
4	70	Surface	General Purpose	QO4S	6.00
		Flush	General Purpose	QO4F	6.00
		Raintight	1¼" Max. Hub	QO4RO	10.70▲
8	100	Surface	General Purpose	QO8S	10.40
		Flush	General Purpose	QO8F	10.40
		Raintight	2" Max. Hub	QO8RO	20.20▲

SPECIFIC APPLICATION DEVICES

2 D.P.	50	Surface	Water Heater	QO4WHS	$ 6.70
		Flush	Separate Feeds	QO4WHF	6.70
3	50	Surface	With 3 Phase	QO403S	8.00
		Flush	4 Wire Interior	QO403F	8.00
		Raintight	1¼" Max. Hub	QO403RO	12.70▲
6	70	Surface	Six Single Poles or	QO6AS	6.60
		Flush	One D.P. with	QO6AF	6.60
		Raintight	Four S.P.	QO6ARO	11.30▲
12	100	Surface	Compact Device and	QO12AS	11.40
		Flush	Cover without Door	QO12AF	11.40
			Max. of 12 S.P. or 6 D.P.		
		Raintight	2" Max. Hubs	QO12ARO	21.20▲

QO2R, QO2AR, QO4R, QO403R and QO6AR with blank endwalls available at RO prices.

▲**Interchangeable hubs for rain-tight enclosures.** Type RO devices have threaded openings for interchangeable hubs or closing caps. Order hub or cap separately from table on page 5 and simply screw into place.

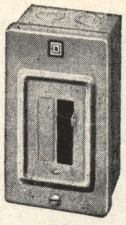
CIRCUIT BREAKERS — PLUG-IN TYPE QO

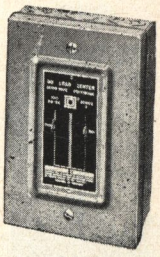
Ampere Rating	Single Pole 120 V. A.C. Catalog No.	List	Two Pole Common Trip 120/240 V. A.C. Catalog No.	List	Two Pole Common Trip 240 V. A.C. Catalog No.	List	Three Pole Common Trip 240 V. A.C. Catalog No.	List
15	QO115	$ 2.80	QO215	$ 6.30	QO215H	$ 18.	QO315	$ 24.
20	QO120	2.80	QO220	6.30	QO220H	18.	QO320	24.
30	QO130	2.80	QO230	6.30	QO230H	18.	QO330	24.
40	QO140	2.80	QO240	6.30	QO240H	18.	QO340	24.
50	QO150	2.80	QO250	6.30	QO250H	18.	QO350	24.
70	.....	....	QO270	18.00	.....	....	.....	....

FOR SWITCHED NEUTRAL CIRCUITS — N.E.C. 5120E AND 2409

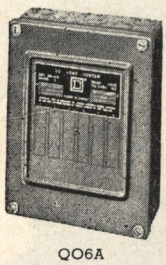
Ampere	2 Wire 120 V. A.C.		3 Wire 120/240 V. A.C.	
15	QO215SWN	$ 8.30	QO315SWN	$ 11.60
20	QO220SWN	8.30	QO320SWN	11.60

Any two adjacent single poles may be tied together with handle tie for 120/240 volts A.C., 3 wire, individual trip service.
Standard Package: Single Poles — 10; Double Poles through 50 A. — 5; Double Pole 70 A. and Three Pole — 1.
Standard Carton: Single Poles 15 A. and 20 A. — 100; 30 A, 40 A. and 50 A. — 40.
Double Poles 15 A. through 50 A. — 20; 70 A., SWN and Three Poles — 5.


QO2


QO2A

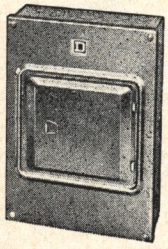

QO4


QO6A

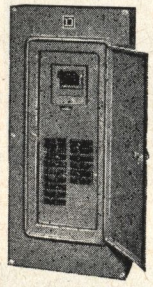

QO8

SCHEDULE B DISCOUNT

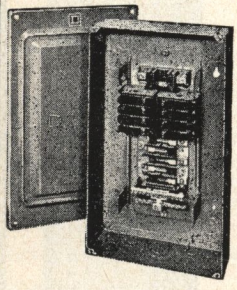
QO CIRCUIT BREAKER LOAD CENTERS



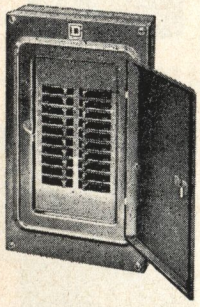
QO12



QO20M



QO20
Basic Device and Trim



QO20
Assembled Device
Door Open

WITH DOOR — **ORDER BREAKERS SEPARATELY** — 12-42 CIRCUITS

Max Number Poles	Mains Rating Amps.	Type Enclosure	BASIC DEVICE—BOX & INTERIOR ONLY Cat. No.	List	COVER WITH DOOR (ORDER SEPARATELY) Flush	Surface	List
1 PHASE — 3 WIRE LUGS ONLY							
12	100 ‡	General Purpose Raintight	QO12 QO12RO	$ 9.40 22.20▲	QOC12F	QOC12S	$ 3.00
16	100 ‡	General Purpose	QO16 *	14.40	QOC16F	QOC16S	4.00
20	100 ‡	General Purpose Raintight	QO20 QO20RO	22.00 37.00▲	QOC20F	QOC20S	4.00
24	125	General Purpose	QO24 *	23.80	QOC24F	QOC24S	7.40
30	150 ★	General Purpose Raintight	QO30 QO30RO	37.00 66.00▲	QOC30F	QOC30S	7.40
42	200	General Purpose	QO42	56.00	QOC42F	QOC42S	9.40
3 PHASE — 4 WIRE LUGS ONLY							
12	100	General Purpose Raintight	QO412 QO412RO	$ 21.20 35.00▲	QOC12F	QOC12S	$ 3.00
20	100	General Purpose Raintight	QO420 QO420RO	30.60 56.20▲	QOC20F	QOC20S	4.00
30	100	General Purpose Raintight	QO430 QO430RO	40.00 64.00▲	QOC30F	QOC30S	7.40
42	200	General Purpose	QO442	64.60	QOC42F	QOC42S	9.40
1 PHASE — 3 WIRE MAIN DISCONNECT							
12	100 Breaker	General Purpose Raintight	QO12M QO12MRO	$ 38.20 53.00▲	QOC12MF	QOC12MS	$ 4.00
20	100 Breaker	General Purpose Raintight	QO20M QO20MRO	45.20 63.60▲	QOC20MF	QOC20MS	7.40
30	200 Pullout	General Purpose	QO30MP	117.00	QOC30MPF QOC30MPTF●	QOC30MPS	10.00 10.00
40	200 Pullout	General Purpose	QO40MP	130.00	QOC40MPF QOC40MPTF●	QOC40MPS	10.00 10.00
3 PHASE — 4 WIRE MAIN DISCONNECT							
12	50 Breaker	General Purpose Raintight	QO412M QO412MRO	$ 82.00 97.00▲	QOC412MF	QOC412MS	$ 4.00
20	100 Breaker	General Purpose Raintight	QO420M QO420MRO	119.60 148.60▲	QOC20MF	QOC20MS	7.40

▲Type RO Raintight device has threaded opening for interchangeable hub or closing cap. Order size required separately.
★200 Amp. mains available — specify Cat. No. QO30A and QO30ARO — add **$ 5.40** list.
●TF covers are for flush drywall construction.
‡Devices having 125 Amp. mains rating (#0 Wire) available. Add Suffix B.
*Available December, 1957.

ACCESSORIES

Description	Cat. No.	List	Description	Cat. No.	List
Handle Ties	QO1HT	$ .10	Interchangeable Hub — ¾"	HC	$ 2.40
Closure Plate (S.P.)	QO1CP	.60	Interchangeable Hub—1 "	HD	2.40
Handle Lock-Off	QO1LO	.20	Interchangeable Hub—1¼"	HE	2.40
Flush Lock	PK2FL	5.40	Interchangeable Hub—1½"	HG	2.40
Closing Cap (Up to 100 A.)	CE	.20	Interchangeable Hub—2 "	HH	4.00
(100 to 200 A.)	CH	.20	Interchangeable Hub—2½"	HW	7.10

SCHEDULE B DISCOUNT

FUSIBLE SERVICE EQUIPMENT

SINGLE MAIN

Fusible Service Entrance Equipment having pullout type switches and plug fuse branches. 120 volt and 120/240 Volt A. C., 1 ϕ-3 wire systems. UL approved — File E10582.

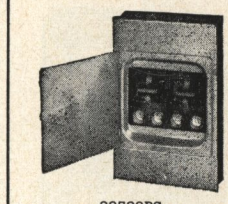
FOR THE AREAS USING A SINGLE MAIN

MAINS		BRANCHES		GENERAL PURPOSE			RAIN-TIGHT (Order Hub Separately)			Circuit Diagram No.
No.	Rating	120/240 Volt Pullouts	120 Volt Plugs	Surface	Flush	List	Device	List	Max. Hub Size	
60 AMPERE SERVICE										
1	1-60 A.	....	4	39512	37522	$ 13.10	39512RO	$ 16.70▲	1¼″	S-1
			6	35712	37722	17.80	39712RO	22.60▲	1¼″	S-1
			8	39912	37922	26.00	39912RO	37.00▲	1¼″	S-1
			10	31002S	31002F	39.00	31002RO	40.00▲	1¼″	S-1
			12	31202S	31202F	43.00	31202RO	44.00▲	1¼″	S-1
		1-60 A.	4	33582S	33582F	$ 16.40	33582RO	$ 22.60▲	1¼″	S-2
							33582R	22.60	None	S-2
			6	33782S	33782F	25.00	33782RO	37.00▲	1¼″	S-2
			8	33982S	33982F	32.00	33982RO	42.00▲	1¼″	S-2
		1-60 A.	4	30462S	30462F	$ 28.00	.....	.....	....	S-3
			6	30662S	30662F	32.00	.....	.....	....	S-3
		1-30 A.	8	30862S	30862F	39.00	.....	.....	....	S-3
100 AMPERE SERVICE										
1	1-100A.	1-60 A.	6	30613S	30613F	$ 45.00	.....	.....	....	S-4
			8	30813S	30813F	50.00	.....	.....	....	S-4
			10	31013S	31013F	55.00	.....	.....	....	S-4
			12	31213S	31213F	60.00	.....	.....	....	S-4
		2-60 A.	8	30823S	30823F	60.00	.....	.....	....	S-5
			10	31023S	31023F	64.00	.....	.....	....	S-5
			12	31223S	31223F	70.00	.....	.....	....	S-5
			16	31623S	31623F	79.00	.....	.....	....	S-5
			20	32023S	32023F	89.00	.....	.....	....	S-5
		1-60 A.	8	30853S	30853F	60.00	.....	.....	....	S-5
		1-30 A.	10	31053S	31053F	64.00	.....	.....	....	S-5
			12	31253S	31253F	70.00	31253RO	$ 81.00▲	2″	S-5
			16	31653S	31653F	79.00	31653RO	90.00▲	2″	S-5
			20	32053S	32053F	89.00	32053RO	104.00▲	2″	S-5
		1-60 A. 2-30 A.	16	*31693S	*31693F	89.00	*31693RO	104.00▲	2″	S-6

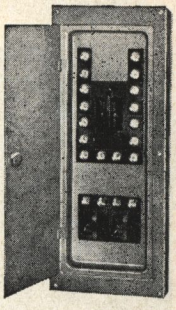
200 AMPERE SERVICE (SEE PAGE 10)

*One pullout not wired. Can be sealed by adding barrier.

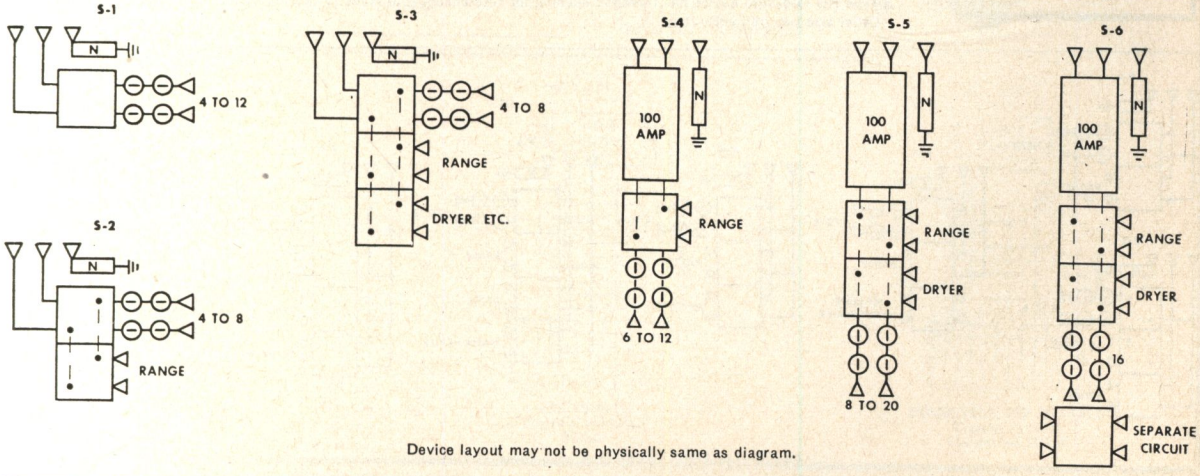
▲Type RO rain-tight device has threaded opening for Interchangeable Hubs or Closing Cap. Order size required separately.



33583PS



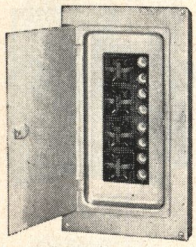
32053S



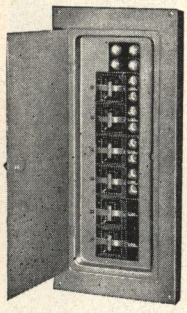
Device layout may not be physically same as diagram.

SCHEDULE C DISCOUNT

FUSIBLE SERVICE EQUIPMENT



30843PS



31293PWHS

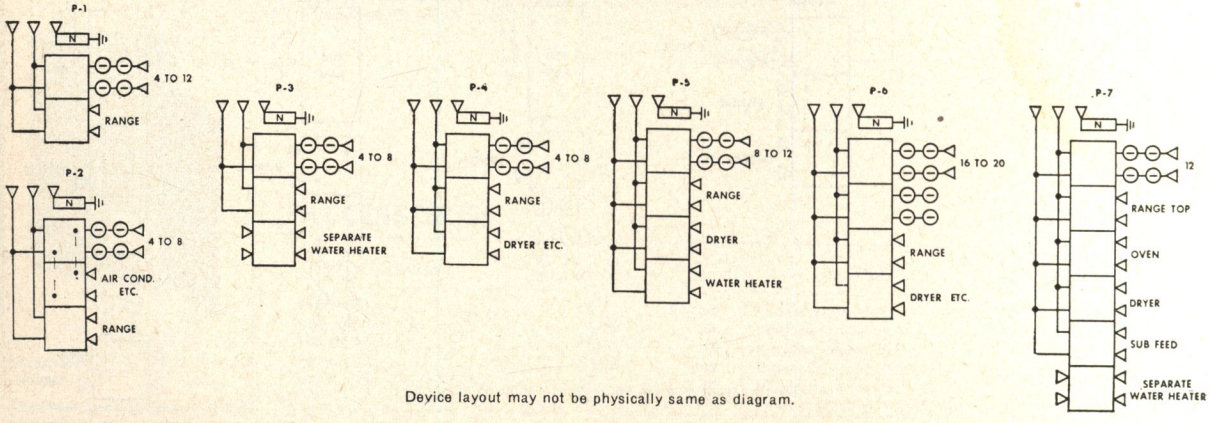
FOR THE AREAS USING 6 CIRCUIT SUB-DIVISION RULE NEC 2351A

PARALLEL MAIN

MAINS No.	MAINS Rating	BRANCHES 120/240 Volt Pullouts	BRANCHES 120 Volt Plugs	GENERAL PURPOSE Surface	GENERAL PURPOSE Flush	GENERAL PURPOSE List	RAIN-TIGHT (Order Hub Separately) Device	RAIN-TIGHT List	RAIN-TIGHT Max. Hub Size	Circuit Diagram No.
70 AMPERE SERVICE										
2	2-60 A.	....	4	33582PS	33582PF	**$ 16.40**	Use	.....	....	P-1
			6	33782PS	33782PF	**25.00**	100	.....	....	P-1
			8	33982PS	33982PF	**32.00**	Amp.	.....	....	P-1
100 AMPERE SERVICE										
2	2-60 A.	0	0	.....	.....	.....	30023PRO	**$ 22.60▲**	2″	P-1
			4	33583PS	33583PF	**$ 16.40**	33538PRO	**22.60▲**	2″	P-1
			6	33783PS	33783PF	**25.00**	33783PRO	**37.00▲**	2″	P-1
			8	33983PS	33983PF	**32.00**	33983PRO	**42.00▲**	2″	P-1
			10	31023PS	31023PF	**39.00**	.....	.....	....	P-1
			12	31223PS	31223PF	**43.00**	.....	.....	....	P-1
		1-60 A.	4	30433PS	30433PF	**$ 28.00**	.....	.....	....	P-2
			6	30633PS	30633PF	**32.00**	.....	.....	....	P-2
			8	30833PS	30833PF	**39.00**	.....	.....	....	P-2
		1-30 A.	4	30463PS	30463PF	**$ 28.00**	.....	.....	....	P-2
			6	30663PS	30663PF	**32.00**	.....	.....	....	P-2
			8	30863PS	30863PF	**39.00**	.....	.....	....	P-2
		1-60 A.	4	✱30483PS	✱30483PF	**$ 28.00**	.....	.....	....	P-3
			6	✱30683PS	✱30683PF	**32.00**	.....	.....	....	P-3
			8	✱30883PS	✱30883PF	**39.00**	.....	.....	....	P-3
		1-30 A.	4	✱30493PS	✱30493PF	**$ 28.00**	✱30493PRO	**$ 37.00▲**	2″	P-3
			6	✱30693PS	✱30693PF	**32.00**	✱30693PRO	**43.00▲**	2″	P-3
			8	✱30893PS	✱30893PF	**39.00**	✱30893PRO	**55.00▲**	2″	P-3
3	2-60 A. 1-30 A.	....	8	30853PS	30853PF	**$ 39.00**	.....	.....	....	P-4
4	2-60 A. 2-30 A.	....	8 12	30843PS 31243PS	30843PF 31243PF	**$ 46.00 58.00**	.....	.....	....	P-5 P-5
	3-60 A. 1-30 A.	....	16 20	‡31643PS ‡32043PS	‡31643PF ‡32043PF	**$ 69.00 82.00**	.....	.....	....	P-6 P-6
6	2-60 A. 4-30 A.	....	12	✱31293PWHS	✱31293PWHF	**$ 74.00**	.....	.....	....	P-7

150 AMPERE SERVICE (SEE PAGE 10)

✱One pullout not wired. Can be sealed by adding barrier.
‡Plug fuses fed by two 60-amp. pullouts.
▲Type RO rain-tight device has threaded opening for Interchangeable Hubs or Closing Cap. Order size required separately.



Device layout may not be physically same as diagram.

SCHEDULE C DISCOUNT

FUSIBLE SERVICE EQUIPMENT

PLUG-IN FUSIBLE EQUIPMENT

Square D's new Fusible Service Equipment with Plug-in construction is the answer to today's increasing residential loads. Devices are available with either 100 ampere or 200 ampere main pullouts feeding busses which will take plug-in fusible branches — plug fuses or 30 and 60 A. pullouts. Select the number and rating of the necessary branches and plug them into the exact combination needed for each job. Two twin plug fuse sections (4 plugs) occupy the same space as a single 30 or 60 ampere pullout. 120/240 volt A.C., 1ϕ-3 wire systems. UL approved—File E23600.

DEVICE AND COVER

ORDER PLUG-IN SECTION SEPARATELY

MAINS		MAX. BRANCH SPACE		BASIC DEVICE BOX & INTERIOR ONLY		COVER AND DOOR ORDER SEPARATELY			
No.	Rating	120/240 Volts Pullout	120 Volts Plugs	Cat. No.	List	Surface	Flush	Flush Dry Wall	List
100 AMP. SERVICE									
1	1-100A.	2 5	20 8	FSP28-1412	**$ 37.00**	FSC28-1412S	FSC28-1412F	FSC28-1412TF	**$ 5.00**
5	1-100A 4-30 60A	1 0	8 12						
150 AMP. SERVICE									
5	1-100A 4-30/60A	1 0	8 12	FSP28-1412A	**42.40**	FSC28-1412S	FSC28-1412F	FSC28-1412TF	**5.00**
200 AMP. SERVICE									
1	1-200A	0 6	24 0	FSP24M	**99.00**	FSC28MS	FSC28MF	FSC28MTF	**10.00**
1	1-200A.	0 6	28 4	FSP28M	**99.00**	FSC28MS	FSC28MF	FSC28MTF	**10.00**
1	1-200A	0 10	40 0	FSP40M	**108.00**	FSC40MS	FSC40MF	FSC40MTF	**10.00**

Maximum branch space column tabulates maximum pullouts with maximum plug combinations.
Any intrim combinations are available by substituting pullouts for each 4 plug branches.
Plug branches may vary in steps of two and pullouts in steps of one.

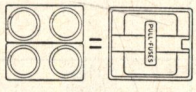
PLUG-IN FUSE SECTIONS

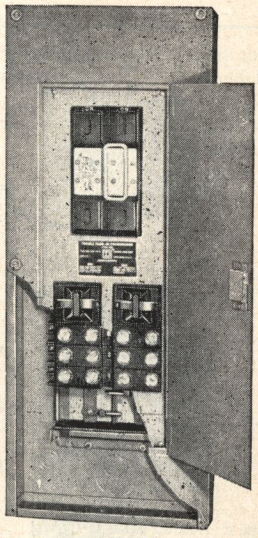
Order Separately	Cat. No.	List	Std. Pkg.
Twin — 30 amp. plug fuse unit	FSP130	**$ 3.40**	10
One — 30 amp. cartridge pullout unit	FSP230	**6.40**	5
One — 60 amp. cartridge pullout unit	FSP260	**6.40**	5

DIMENSIONS

Device	Height	Width	Depth	Std. Pkg.
FSP40M	40 "	14"	4⅛"	1
FSP28M	35½"	14"	4⅛"	1
FSP24M	35½	14"	4⅛"	1
FSP28-1412 and A	26⅛"	14"	4⅛"	1

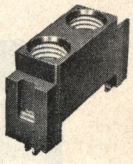
Pullout Sections occupy same space as two twin plug fuse sections.



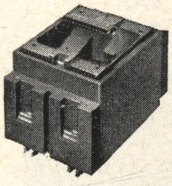


FSP28M

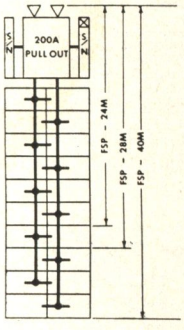
PLUG-IN SECTIONS



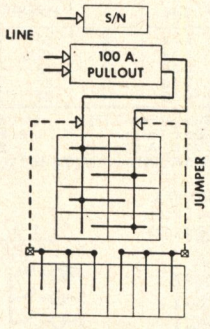
FSP130
30 Amp. Twin Plug Fuse Section



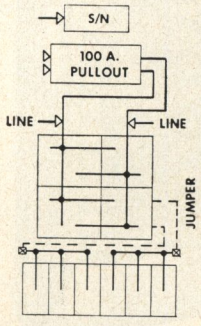
FSP230
FSP260
30 Amp. or 60 Amp. Cartridge Fuse Pullout



200 Ampere Devices



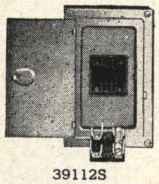
FSP 28-1412 Series Connected Mains



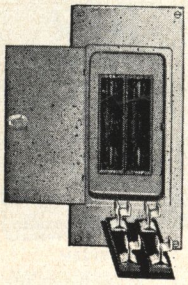
FSP-28-1412, FSP 28-1412A Typical Parallel Connected Mains

SCHEDULE C DISCOUNT

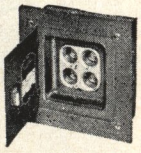
FUSIBLE SERVICE EQUIPMENT



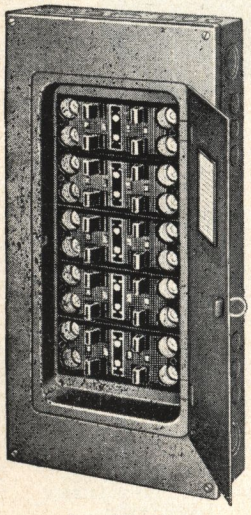
39112S



30004S



37421
Type NSP



Type NTPS-20-3L

PULLOUT DISCONNECTS

120/240 V. A.C. INSULATED GROUNDABLE NEUTRAL — **NO BRANCH CIRCUITS**

MAINS		GENERAL PURPOSE			RAINTIGHT (Order Hubs Separately)		
System	Rating	Surface	Flush	List	Device	List	Max. Hub
1φ-3 W.	60	39112	37122	**$ 12.00**	39112RO	**$ 13.10▲**	1¼"
	100	39113S	39113F	**30.00**	39113RO	**35.00▲**	2 "
	200	30004S	30004F	**59.00**	30004RO	**80.00▲**	2½"

NOT-FUSIBLE MAIN SWITCH

120/240 V. A.C. — 1φ-3 WIRE GROUNDED NEUTRAL — **TOGGLE TYPE**

MAINS		Branches 120 V. Plugs	GENERAL PURPOSE			RAINTIGHT (Order Hubs Separately)		
No.	Rating		Surface	Flush	List	Device	List	Max. Hub
1	30 A.	4	32481	32471	**$ 13.10**	32481RO	**$ 16.40▲**	1¼"
		6	32681	32671	**16.60**	32681RO	**20.20▲**	1¼"
1	60 A.	4	32482	32472	**13.10**	32482RO	**16.40▲**	1¼"
		6	32682	32672	**16.60**	32682RO	**20.20▲**	1¼"

▲Type RO rain-tight device has threaded opening for Interchangeable Hubs or Closing Cap. Order size required separately. See page 12.

FUSE CABINETS

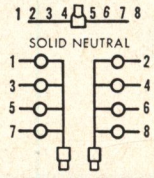
No. Branches	Lug Mains		Weight	Box Dimensions (Inside)			1 Phase—3 Wire		
							Flush	Surface	
	Amp.	Size		●Hgt.	●Width	Depth	Cat. No.	Cat. No.	List Price
2	30	8-14	6	6⅝	6⅝	2¾	37221	39211	**$ 5.20**
4	30	8-14	6	6⅝	6⅝	2¾	37421	39411	**7.10**
6	45	6-10	11	11⅛	7⅜	3⅛	37621	39611	**11.90**
8	60	4-10	12	12⅞	7⅜	3⅛	37821	39811	**16.10**
10	60	4-10	15	15⅝	8⅝	3⅛	37021	39011	**23.80**
12	60	4-10	17	16⅞	8⅝	3⅛	37121	39111	**31.00**

●For outside dimensions of FLUSH front, add approximately 1¼" to height and width of box.
FRONTS: Spring Door Catch. **FINISH:** Blue-gray Enamel. Conduit Endwalls.
MAINS: 120/240 Volts A.C. or D.C. **BRANCHES:** Single Pole, No Switch, 30 Amp., 120 V.

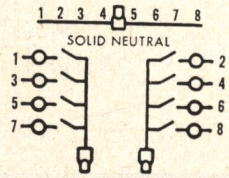
FUSIBLE LOAD CENTERS

No. Branches	Lugs Mains		Weight	Box Dimensions			1 Ph. 3 Wire A.C. Only		3 Ph. 4 Wire A.C. Only	
	Amp.	Size		Height	Width	Depth	*Catalog No.	List Price	*Catalog No.	List Price
4	30	1-14	30	10	12	4	NTPS04-3L	**$ 18.40**		
8	60	1-14	33	12½	12	4	NTPS08-3L	**26.00**	NTPS08-4L	**$ 38.00**
12	60	1-10	37	16	12	4	NTPS12-3L	**51.00**	NTPS12-4L	**56.00**
16	100	1-10	41	21	12	4	NTPS16-3L	**76.00**	NTPS16-4L	**83.00**
20	100	1-10	44	24	12	4	NTPS20-3L	**107.00**	NTPS20-4L	**119.00**

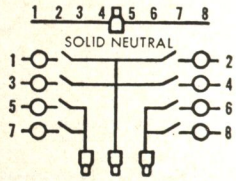
Wiring Gutters. Side gutters—1⅞" End Gutters—2" on 4, 8 and 12 circuits; 3" on 16 and 20 circuits.
FRONTS: Spring Door Catch. **FINISH:** Fronts — Blue-gray; Boxes — galvanized steel.
MAINS: 120/240 Volts, A.C. only. **BRANCHES:** Single Pole Switch, 30 Amp., 120 V.
***SURFACE OR FLUSH:** When ordering add suffix letter "S" or "F" to catalog number to indicate mounting.



NSP-3



NTPS-3L



NTPS-4L

SCHEDULE C DISCOUNT

LIGHT DUTY SAFETY SWITCHES
SINGLE THROW

90000 LINE

TYPE LD LIGHT DUTY SAFETY SWITCHES are designed for residential and commercial applications where price is limiting and the service factor is not great — such as lighting, room conditioning and appliance loads. U/L approved File E2875. Meets Federal Specification W-S-865 for type D switches.

System	FUSIBLE — INDOOR — NEMA TYPE 1 — Rating — Amp.	A.C. Horsepower 1φ	3φ	2φ	Fuse	Flat Base — Catalog Number	◐Compact Type — Catalog Number	List Price	RAIN TIGHT NEMA TYPE 3R — ▲Type RO—Add Hub or Cap — Catalog Number	List Price	Max. Hub Size Inches	NOT FUSIBLE — INDOOR NEMA TYPE 1 — Flat Base — Amp.	Catalog Number	List Price
2-WIRE S/N (1 BLADE, 1 FUSE) 120 VOLTS A.C.														
	30	¾			Plug	D97211	90211	$ 4.50	△D97211RO	$ 10.20	1¼			
	30	¾			Plug		‡90211M	4.50						
	30	¾			Plug		*90211WH	5.40						
	30	¾			Plug		*97211WH	6.20						
	30	¾			Cart.	D97251		5.00	△D97251RO	11.90	1¼			
2-POLE, 120/240 VOLTS A.C. (PLUG) — 240 VOLTS A.C. (CART.)														
	30	1½			Plug	D99211	93211	$ 5.60	△D99211RO	$ 11.60	1¼			
	30	1½			Plug		*93211WH	6.70						
	30				Plug		†93011	12.50						
	30				Plug		† *93011WH	14.50						
	30	1½			Cart.	D98251	93251	6.70	△D98251RO	11.90	1¼	30	D91251	$ 10.20
	60	3				D96252		14.90	D96252RO	23.20	1¼	60	D91252	14.90
	100	7½				D96253		30.00	D96253RO	35.00	2	100	D91253	32.00
	200	15				D96254		59.00	D96254RO	80.00	2½	200	D91254	59.00
3-WIRE S/N (2 BLADE, 2 FUSES) 120/240 VOLTS A.C. (PLUG) — 240 VOLTS A.C. (CART.)														
	30	1½			Plug	D97311	90311	$ 5.90	D97311RO	$ 11.90	1¼			
	30	1½			Plug		*90311WH	7.00						
	30				Plug		*97311WH	8.10						
	30	1½			Cart.		97351	7.60	97351RO	12.50	1¼			
	30	1½	3		Cart.	◐97351X	90351	7.60						
	60	3	7½			D97312		14.90	△D97312RO	23.20	1¼			
	100	7½	15			D97313		30.00	△D97313RO	35.00	2			
	200	15	25			D97314		59.00	D97314RO	80.00	2½			
3-POLE, 120 VOLTS A.C. (PLUG) — 240 VOLTS A.C. (CART.)														
	30		1½		Plug	D99311		$ 11.10	99311RO	$ 18.50	1¼			
	30		1½		Plug		99311	10.20						
	30				Plug		*99311WH	14.50						
	30		3		Cart.	D96351		14.40	△ 99351RO	19.00	1¼	30	91351	$ 10.20
	30		3		Cart.		99351	13.10				30	D91351	11.10
	60		7½			D96352		20.80	△D96352RO	29.00	1¼	60	D91352	14.90
	100		15			D96353		38.00	△D96353RO	54.00	2	100	D91353	32.00
	200		25			D96354		81.00	D96354RO	97.00	2½	200	D91354	59.00
4-WIRE S/N (3 BLADES, 3 FUSES) 240 VOLTS A.C. (CART.)														
	30		3		Cart.	D97451		$ 14.40	97451RO	$ 19.00	1¼			
	30		3		Cart.		97451	13.10						
	60		7½			D97412		20.80	D97412RO	29.00	2			
	100		15			D97413		38.00	D97413RO	54.00	2			
	200		25			D97414		81.00	D97414RO	97.00	2½			
4-POLE, 240 VOLTS A.C. (CART.)														
	30			3	Cart.	D96451		$ 19.00				30	D91451	$ 16.10
	60			7½		D96452		35.00				60	D91452	32.00
	100			15		D96453		82.00				100	D91453	78.00
	200			30		D96454		137.00				200	D91454	127.00

Plug fuse switches rated 120/240 volts A.C. only.

All Neutrals — Insulated Groundable.

FINISH: Blue-gray Enamel. **RAINTIGHT**—Extra coat of Glyptal.

◐Cat. No. 90000 Series and 93000 Series Switches are Rotor Disc Type—Others are swing out type.

†Dual water heater switch. (Two 93211's in one box).

‡Same as 90211 except in larger box.

*Has dead-front shield over interior. 120 or 120/240 V. A.C.

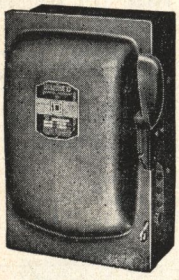
△Raintight Switches without threaded openings available. Use R suffix instead of RO. Same price level.

▲INTERCHANGEABLE HUBS for Raintight Enclosures, Type RO devices have threaded opening for interchangeable hubs or closing caps. Order hub or cap separately from table below, and simply screw into place. For details see Page 12.

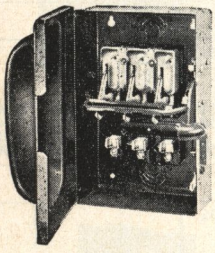
Conduit Size Inches	¾	1	1¼	1½	2	2½	Cap.	30-60 100 A.	200 A.
Hub Cat. No.	HC	HD	HE	HG	HH	HW	Cap Cat No	CE	CH
List Each	$2.40	$2.40	$2.40	$2.40	$4.00	$7.10	List Each	$ .20	$ .20

SCHEDULE C DISCOUNT

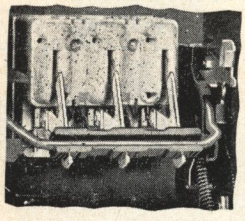
NORMAL DUTY SAFETY SWITCHES
SINGLE THROW NOT FUSIBLE



Cat. No. A86342
Cover Closed



Cat. No. A86342
Cover Open



Visible Blades
and Interlock



Type RO
Rain-tight Switch
Showing
Threaded Opening for
Interchangeable
Hub or Cap

TYPE ND — NORMAL DUTY SAFETY SWITCHES are designed for application where safety is essential and reasonable performance and continuity of service are required. They meet Federal Specification W-S-865 for Type A Switches. U/L Approved: File E2875. Quick-Make Quick-Break and Full Cover Interlock thru 600 ampere. 800 and 1200 amp. are quick-break only and have vault cover handle.

NOT FUSIBLE

System	Amps.	Indoor NEMA Type 1 Sheet Steel Enclosure Cat. No.	List Price	Rain-tight NEMA Type 3R ▲Type RO Add Hub or Cap Catalog Number	List Price	Max. Hub Size (Inches)	Horsepower Ratings A.C. 240 V. or 480 V. as Indicated Below 1 φ	3 φ	2 φ	600 V. 1 φ	3 φ	2 φ	D.C.
2 POLE, 240 VOLTS A. C. — 250 VOLTS D. C.							← (240 V.) →						
	30	A81251	$ 18.				3	..	..	..	..	..	5
	60	A81252	33.				10	..	..	..	..	..	10
	100	A81253	51.	Use 3 Pole			15	..	..	..	..	..	20
	200	A81254	79.	Switch for			15	..	..	..	..	..	40
	400	A81255	178.				..	..	..	..	..	..	50
	600	A81256	315.	2 Pole Application			..	..	..	..	..	..	..
	800	84257	480.				..	..	..	..	..	..	..
	1200	84258	656.				..	..	..	..	..	..	..
3 POLE, 240 VOLTS A. C.													
	30	A81351	$ 18.	A81341RO	$ 33.	1¼	..	7½	..	..	..	..	..
	60	A81342	33.	A81342RO	57.	1¼	..	15	..	..	..	..	..
	100	A81343	51.	A81343RO	81.	2	..	30	..	..	..	..	..
	200	A81344	79.	A81344RO	97.	2½	..	50	..	..	..	..	..
	400	A81345	178.	A81345R	244.	‡‡	..	50	..	..	..	..	..
	600	A81346	315.	A81346R	487.		..	..	..	..	..	..	..
	800	84347	642.	.....	....	....	..	..	..	..	..	..	..
	1200	84348	862.	.....	....	....	..	..	..	..	..	..	..
2 POLE, 480 VOLTS A. C. — 600 VOLTS A. C. OR D. C.							← (480 V.) →						
	30	A81261	$ 18.				7½	..	..	10	..	..	15
	60	A81262	33.				20	..	..	25	..	..	25
	100	A81263	51.	Use 3 Pole			30	....	..	40	..	..	50
	200	A81264	79.	Switch for			50	..	..	50	..	..	50
	400	A81265	178.				..	..	..	..	..	..	..
	600	A81266	315.	2 Pole Application			..	..	..	..	..	..	..
	800	★84247	480.				..	..	..	..	..	..	..
	1200	★84248	656.				..	..	..	..	..	..	..
3 POLE, 480 VOLTS A. C. — 600 VOLTS A. C.													
	30	A81341	$ 18.	A81341RO	$ 33.	1¼	..	15	..	..	20	..	..
	60	A81342	33.	A81342RO	57.	1¼	..	30	..	..	40	..	..
	100	A81343	51.	A81343RO	81.	2	..	50	..	..	50	..	..
	200	A81344	79.	A81344RO	97.	2½	..	50	..	..	50	..	..
	400	A81345	178.	A81345R	244.	‡‡	..	..	..	..	..	..	..
	600	A81346	315.	A81346R	487.		..	..	..	..	..	..	..
	800	84347	642.	.....	....	....	..	..	..	..	..	..	..
	1200	84348	862.	.....	....	....	..	..	..	..	..	..	..
4 POLE, 480 VOLTS A. C. — 600 VOLTS A. C.													
	30	.....	....	.....	....	....	..	..	..	..	..	..	..
	60	A81442	$ 56.	.....	....	....	..	..	40	..	..	50	..
	100	A81443	104.	.....	....	....	..	..	50	..	..	50	..
	200	A81444	150.	.....	....	....	..	..	50	..	..	50	..
	400	A81445	321.	.....	....	....	..	..	..	..	..	..	..
	600	A81446	559.	.....	....	....	..	..	..	..	..	..	..
	800	84447	828.	.....	....	....	..	..	..	..	..	..	..
	1200	84448	1136.	.....	....	....	..	..	..	..	..	..	..

Provisions for rejection type current limiting fuses available on special order. Contact factory for pricing.

ALL NEUTRALS — INSULATED GROUNDABLE
Switching Neutral 3-Wire—Price same as for 3-Pole Switch. Add "SWN" to 3-Pole Catalog Number. (240 V. Only).

FINISH: Blue-gray Enamel.

*60 Ampere Switch with 30 Amp. Fuse spacings and clips.

★600 V. A.C. — 250 V. D.C. Only.

†A.C. only.

◐Swing-out base — No interlock.

‡Hubs larger than 2½" available on order — welded.

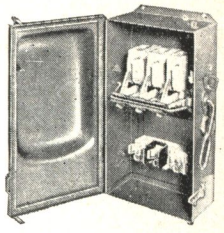
▲INTERCHANGEABLE HUBS for Rain-tight Enclosures. Type RO devices, have threaded opening for interchangeable hubs or closing caps. Order hub or cap separately from table below, and simply screw into place. For details see Page 12.

Conduit Size Inches	¾	1	1¼	1½	2	2½	Cap.	30-60 100 A.	200 A.
Hub Cat. No.	HC	HD	HE	HG	HH	HW	Cap Cat. No.	CE	CH
List Each	$2.40	$2.40	$2.40	$2.40	$4.00	$7.10	List Each	$ .20	$ .20

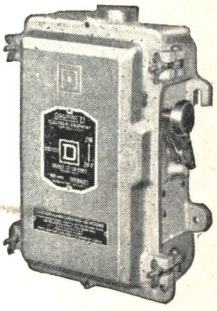
SEE NEXT PAGE FOR DIMENSIONS AND LUG SIZES

SCHEDULE A DISCOUNT

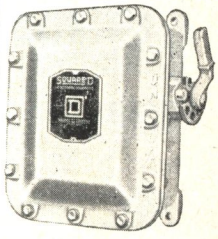
HEAVY DUTY SAFETY SWITCHES
SINGLE THROW NOT FUSIBLE



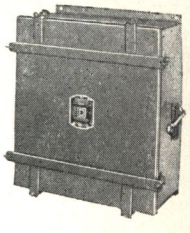
Cat. No. H86342



Cat. No. 53342D



Cat. No. 54341



Cat. No. 88345WP

TYPE HD — HEAVY DUTY SAFETY SWITCHES are designed for application where safety, performance and continuity of service are emphasized, such as mass production industries. This type exeeds Federal Specification W-S-865 for Type A Switches. U.L. Approved: File E2875 and E10673. **Quick-Make Quick-Break** and Full Cover Interlock.

NOT FUSIBLE

System	Amp.	Industrial Use Cover Gasket NEMA 12 Catalog Number	Industrial Use Cover Gasket NEMA 12 List Price	Dust-tight — Water-tight NEMA 4 & 5▲ Explosion-Resisting 30-200 A. NEMA 9 Class I, Group D Catalog Number	Dust-tight — Water-tight NEMA 4 & 5▲ Explosion-Resisting 30-200 A. NEMA 9 Class I, Group D List Price	Explosion Resisting● NEMA 7 Class I, Group D Catalog Number	Explosion Resisting● NEMA 7 Class I, Group D List Price	Horsepower Rating A.C. 240 V. or 480 V. as Indicated Below 1 φ	3 φ	2 φ	600 V. 1 φ	3 φ	2 φ	D.C.
2 POLE, 240 VOLTS A. C. — 250 VOLTS D.C.								← (240 V.) →						
	30	H81251	$ 27.	53261D	$ 109.	54261	$ 165.	3	..	..	..	..	..	5
	60	H81252	36.	53262D	118.	54262	193.	10	..	..	..	..	..	10
	100	H81253	59.	53263D	301.	.....	.....	15	..	..	..	..	..	20
	200	H81254	83.	53264D	417.	.....	.....	15	..	..	..	..	..	40
	400	H81255	190.	H81265WP	782.	.....	.....	..	..	..	..	..	..	50
	600	H81266	321.	H81266WP	1135.	.....	.....	..	..	..	..	..	..	..
3 POLE, 240 VOLTS A.C.														
	30	H81341	$ 39.	53341D	$ 121.	54341	$ 181.	..	7½	..	..	..	..	..
	60	H81342	49.	53342D	129.	54342	211.	..	15	..	..	..	..	..
	100	H81343	72.	53343D	321.	.....	.....	..	30	..	..	..	..	..
	200	H81344	95.	53344D	438.	.....	.....	..	50	..	..	..	..	..
	400	H81345	247.	H81345WP	877.	.....	.....	..	50	..	..	..	..	..
	600	H83146	396.	H81346WP	1178.	.....	.....	..	..	..	..	..	..	..
4 POLE, 240 VOLTS A.C.														
	60	H81442	$ 63.	.....	.....	.....	.....	..	..	20	..	..	..	..
	100	H81443	110.	.....	.....	.....	.....	..	..	30	..	..	..	..
	200	H81444	176.	.....	.....	.....	.....	..	..	50	..	..	..	..
	400	H81445	353.	.....	.....	.....	.....	..	..	50	..	..	..	..
	600	H81446	615.	.....	.....	.....	.....	..	..	..	..	..	..	..
2 POLE, 480 VOLTS A. C. — 600 VOLTS A. C. OR D.C.								← (480 V.) →						
	30	H81261	$ 33.	53261D	$ 109.	★54261	$ 165.	7½	..	..	10	..	..	10
	60	H81262	43.	53262D	118.	★54262	193.	20	..	..	25	..	..	25
	100	H81263	70.	53263D	301.	.....	.....	30	..	..	40	..	..	40
	200	★H81264	91.	53264D	417.	.....	.....	50	..	..	50	..	..	50
	400	H81265	222.	H81265WP	782.	.....	.....	..	..	..	..	..	..	..
	600	H81266	321.	H81266WP	1135.	.....	.....	..	..	..	..	..	..	..
3 POLE, 480 VOLTS A. C. — 600 VOLTS A. C.														
	30	H81341	$ 38.	53341D	$ 121.	54341	$ 181.	..	15	..	..	20	..	..
	60	H81342	49.	53342D	129.	54342	211.	..	30	..	..	40	..	..
	100	H81343	72.	53343D	321.	.....	.....	..	50	..	..	50	..	..
	200	H81344	95.	53344D	438.	.....	.....	..	50	..	..	50	..	..
	400	H81345	247.	H81345WP	877.	.....	.....	..	..	..	..	..	..	..
	600	H81346	396.	H81346WP	1178.	.....	.....	..	..	..	..	..	..	..
4 POLE, 480 VOLTS A. C. — 600 VOLTS A. C.														
	60	H81442	$ 63.	.....	.....	.....	.....	..	..	40	..	..	50	..
	100	H81443	110.	.....	.....	.....	.....	..	..	50	..	..	50	..
	200	H81444	176.	.....	.....	.....	.....	..	..	50	..	..	50	..
	400	H81445	353.	.....	.....	.....	.....	..	..	..	..	..	..	..
	600	H81446	615.	.....	.....	.....	.....	..	..	..	..	..	..	..

Provisions for rejection type current limiting fuses available on special order. Contact factory for pricing.

All Neutrals — Insulated groundable.

3-Wire Switching Neutral switches are priced the same as 3-pole switches and SWN is added to the 3-pole catalog number (240 volts only).

ƙ60 amp. switch with 30 amp. fuse spacing and clips. ★600 volts A.C. — 250 volts D.C. only.

◐A.C. only.

▲Cast aluminum enclosures standard but cast iron supplied on order at no extra cost. Enclosures have threaded conduit holes as follows: 30 amp. one ¾″ top and bottom, 50 amp. one 1¼″ top and bottom; 100 amp. two 1½″ in bottom and 200 amp. two 2½″ in bottom. Two additional holes of sizes shown will be furnished at no extra cost. Holes differing from standard can be supplied at extra charge. Specify drillings as required in 400 and 600 ampere W.P. switches.

●Cast iron NEMA 7 enclosures have threaded conduit holes as follows: 30 amp. two ¾″ bottom, 60 amp. two 1¼″ bottom.

See Page 23 for Dimensions and Lug Sizes.

SCHEDULE A DISCOUNT

DOUBLE THROW SAFETY SWITCHES

DOUBLE THROW

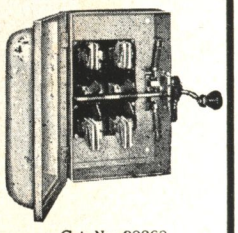
DOUBLE THROW SAFETY SWITCHES are designed to transfer loads from one supply source to another. Horsepower ratings are not necessary, since use as motor circuit switches is not expected.

Amps.	FUSIBLE TOP AND BOTTOM		NOT FUSIBLE	
	Sheet Steel Enclosure -- NEMA Type 1			
	Cat. No.	List Price	Cat. No.	List Price
2-POLE, 240 VOLTS A.C. — 250 VOLTS D.C.				
30	◆92251F	$ 56.	◆92251	$ 35.
30-60				
60	◆82252F	102.	◆82252	55.
100	◆82253F	152.	◆82253	80.
200	◆82254F	213.	◆82254	107.
400	92255F	430.	92255	303.
600	92256F	535.	92256	429.
3-POLE, 240 VOLTS A.C.				
30	◆92351F	$ 60.	◆92351	$ 40.
30-60				
. 60	◆82352F	110.	◆82352	60.
100	◆82353F	185.	◆82353	97.
200	◆82354F	280.	◆82354	153.
400	92355F	590.	92355	405.
600	92356F	713.	92356	563.
4-POLE, 240 VOLTS A.C.				
30	92451F	$ 85.	◆92451	$ 59.
30-60				
60	92452F	135.	◆92452	85.
100	92453F	217.	◆92453	174.
200	82454F	353.	◆92454	241.
400	92455F	656.	92455	544.
600	92456F	843.	92456	708.

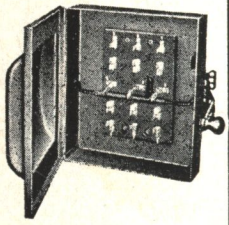
Amps.	FUSIBLE TOP AND BOTTOM		NOT FUSIBLE	
	Sheet Steel Enclosure NEMA Type 1			
	Cat. No.	List Price	Cat. No.	List Price
2-POLE, 600 VOLTS A.C. — 600 VOLTS D.C.				
	82261F	$ 113.		
			◆82262	$ 56.
	◆82262F	117.		
	◆★82263F	203.	◆★82263	87.
	◆★82264F	247.	◆★82264	120.
	★92245F	462.	★92245	340.
			★92246	477.
3-POLE, 600 VOLTS A.C.				
	82341F	$ 120.		
			◆82342	$ 67.
	◆82342F	123.		
	◆82343F	217.	◆82343	107.
	◆82344F	325.	◆82344	165.
	92345F	605.	92345	428.
			92346	619.
4-POLE, 600 VOLTS A.C.				
	92441F	$180.		
			◆92442	$ 94.
	92442F	185.		
	92443F	321.	◆92443	199.
	82444F	414.	◆92444	265.
	92445F	711.	92445	593.
			92446	768.

EXPLOSION RESISTING ENCLOSURE

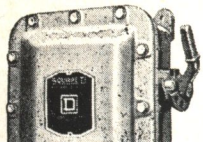
Class 1, Group D, NEMA 7, Hazardous Locations — Three 1½" Threaded Conduit Holes in Bottom
60 Amp. — 2 Pole — 600 V. A.C./D.C. — Cat. 52262 — List $ 413.
3 Pole — 600 V. A.C./D.C. — Cat. 52342 — List 430.



Cat. No. 82263



Cat. No. 92351F



Cat. No. 52342

DATA AND DIMENSIONS

Catalog Number	Wt.	Overall Dimensions H	W	W/H	D	Std. Pkg.
52262	230	20⅛	17½	20 1/16	7	1
52342	238	20⅛	17½	20 1/16	7	1
82252	16	13⅜	9⅛	12¾	6⅜	1
82252F	24	23⅛	9 3/16	11 11/16	6 5/16	1
82253	27	16 5/16	11 3/16	14 5/16	8 1/16	1
82253F	40	30 1/16	11¼	14 5/16	7⅞	1
82254	47	22 13/32	15 23/32	19 5/16	9 1/16	1
82254F	75	38 5/16	15¾	19⅜	9 1/16	1
82261F	25	23⅛	9 3/16	11 11/16	6 5/16	1
82262	16	13⅜	9⅛	12¾	6⅜	1
82262F	26	23⅛	9 3/16	11 11/16	6 5/16	1
82263	26	16 5/16	11 3/16	14 5/16	8 1/16	1
82263F	35	30 1/16	11¼	14 5/16	7⅞	1
82264	49	22 13/32	15 23/32	19 5/32	9 1/16	1
82264F	45	38 5/16	15¾	19⅜	9 1/16	1
82341F	34	23⅛	12 13/16	16½	6 9/16	1
82342	20	12⅞	12 13/16	16 7/16	6 9/16	1
82342F	33	23⅛	12 13/16	16½	6 9/16	1
82343	33	16 5/16	15 5/16	19 1/16	8⅝	1
82343F	53	30 1/16	15 5/16	19	8 1/16	1
82344	63	23 1/16	20	23¾	11 1/16	1
82344F	93	38 5/16	19 31/32	23 23/32	13 1/64	1
82352	19	12⅞	12 13/16	16 7/16	6 9/16	1
82352F	29	23⅛	12 13/16	16½	6 9/16	1
82353	32	16 5/16	15 5/16	19 1/16	8⅝	1
82353F	43	30 1/16	15 5/16	19	8 1/16	1
82354	62	23 1/16	20	23¾	11 1/16	1
82354F	91	38 5/16	19 31/32	23 23/32	13 1/64	1
82444F	145	38 5/16	25 1/16	28 3/16	12¾	1
82454F	140	38 5/16	25 1/16	28 3/16	12¾	1
92245	81	31⅛	16¾	20	12⅛	1
92245F	111	46¾	25¾	29	12¾	1
92246	90	52 1/16	18⅞	22	16⅜	1
92251	9	10¾	7⅛	10⅜	4¼	1
92251F	19	16⅞	9⅜	12⅝	6⅜	1

Catalog Number	Wt.	Overall Dimensions H	W	W/H	D	Std. Pkg.
92255	81	31⅛	16¾	20	12⅛	1
92255F	131	46¾	25¾	29	12¾	1
92256	90	52 1/16	18⅞	22	16⅜	1
92256F	225	51¾	21	23 5/16	15¼	1
92345	110	31⅛	21 1/16	25 15/16	12¼	1
92345F	240	46¾	25¾	29	12¾	1
92346	140	52¾	25⅜	28⅝	16⅜	1
92351	14	10¾	7⅛	10⅜	4¼	1
92351F	25	16⅞	14½	16½	6½	1
92355	140	31⅛	21 1/16	24 15/16	12¼	1
92355F	200	46¾	25¾	29	12¾	1
92356	140	42¾	25⅜	28⅝	16⅜	1
92356F	230	54⅝	33	36 5/16	14⅜	1
92441F	42	12⅞	17	20¼	7½	1
92442	28	12⅞	17	20¼	7½	1
92442F	42	23	18½	20⅜	6½	1
92443	58	22½	20¼	23½	11⅛	1
92443F	80	30½	18¼	19⅞	7½	1
92444	95	31⅛	22⅞	26⅛	11¾	1
92445	130	38⅝	24¾	27⅞	14 15/16	1
92445F	190	46¾	36¼	37⅝	10	1
92446	175	52¾	31 13/16	35⅛	16⅜	1
92451	19	12⅞	13	14⅝	6½	1
92451F	36	16⅞	17⅝	21⅜	5¼	1
92452	28	12⅞	17	20¼	7½	1
92452F	47	18	17⅝	20⅞	6 5/16	1
92453	58	22½	20¼	23½	11⅛	1
92453F	70	30½	18¼	19⅞	7½	1
92454	88	31⅛	22⅞	26⅛	11¾	1
92455	175	38⅝	24¾	27⅞	14 15/16	1
92455F	210	46⅝	36¼	37⅝	10	1
92456	75	52¾	31 13/16	34⅛	16⅜	1
92456F	325	55	42⅝	45⅞	14½	1

SOLDERLESS LUG SIZES

Ampere Rating	Lug Size
30	4-14
60	4-14
100	0-14
200	250MCM-6
400	2-350MCM-1 1-500MCM-1
600	2-500MCM-3/0

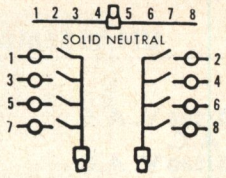
★600 Volts A.C. — 250 Volts D.C. only ◆U/L Approved File E2875E

SCHEDULE A DISCOUNT

FUSIBLE LIGHTING PANELBOARDS

TYPE NTPR-3

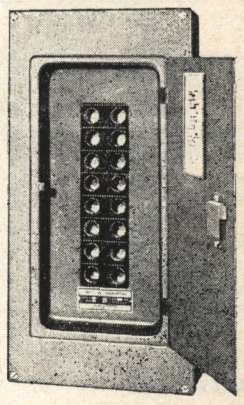
1φ. 3W. S/N A.C. or D.C. Plug Fusible 1 Pole Switch



MAINS: 125/250 V. A. C. or D. C.
BRANCHES: Single Pole 30 Amp. 125 V. 2-Wire S/N Tumbler Switch, Plug Fusible.
BOXES: 17″ wide, 4¼″ deep. Galvanized steel.
FRONTS: Single Door Type with Flush Lock. Blue-gray Finish.
GUTTERS: 4″ Sides and Ends.

		MAINS: LUGS ONLY			MAINS: FUSIBLE SWITCH — 2 POLE				
No. Branches	Amp. Mains	*Catalog Number	Box Hgt.	List Price	Catalog Number	List Price	▲Box Cat. No.	Interior Catalog Number	*Front Catalog Number
8	60	NTPR-08-3L	14	$ 73.	NTPR-08-3M	$ 103.	MR23	MR308M	MR1723
12	60	NTPR-12-3L	17	91.	NTPR-12-3M	120.	MR23	MR312M	MR1723
16	100	NTPR-16-3L	26	117.	NTPR-16-3M	149.	MR29	MR316M	MR1729
20	100	NTPR-20-3L	29	134.	NTPR-20-3M	166.	MR32	MR320M	MR1732
24	200	NTPR-24-3L	32	158.	NTPR-24-3M	248.	MR44	MR324MP	MR1744
28	200	NTPR-28-3L	35	175.	NTPR-28-3M	266.	MR47	MR328MP	MR1747
32	200	NTPR-32-3L	38	192.	NTPR-32-3M	283.	MR50	MR332MP	MR1750
36	200	NTPR-36-3L	41	210.	NTPR-36-3M	311.	MR53	MR336MP	MR1753
40	200	NTPR-40-3L	44	227.	NTPR-40-3M	328.	MR56	MR340MP	MR1756

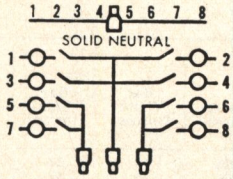
SCHEDULE G1 DISCOUNT SCHEDULE G2 DISCOUNT



Type NRP 16-3L

TYPE NTPR-4

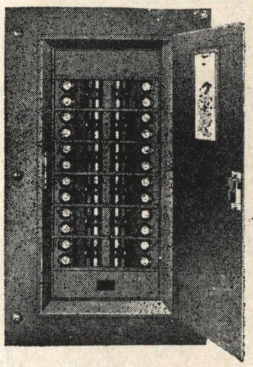
3φ 4W. S/N A.C. or D.C. Plug Fusible 1 Pole Switch



MAINS: 120, 208 V. A. C. or D. C.
BRANCHES: Single Pole, 30 Amp., 125 V., 2-Wire S/N Tumbler Switch, Plug Fusible.
BOXES: 17″ wide, 4¼″ deep. Galvanized steel.
FRONTS: Single Door Type with Flush Lock. Blue-gray Finish.
GUTTERS: 4″ Sides and Ends.

		MAINS: LUGS ONLY			MAINS: FUSIBLE SWITCH — 3 POLE				
No.. Branches	Amp. Mains	*Catalog Number	Box Hgt.	List Price	Catalog Number	List Price	▲Box Cat. No.	Interior Catalog Number	*Front Catalog Number
8	60	NTPR-08-4L	14	$ 84.	NTPR-08-4M	$ 113.	MR23	MR408M	MR1723M
12	60	NTPR-12-4L	17	102.	NTPR-12-4M	131.	MR29	MR412M	MR1729M
16	60	NTPR-16-4L	26	119.	NTPR-16-4M	148.	MR32	MR416M	MR1732M
20	100	NTPR-20-4L	29	145.	NTPR-20-4M	203.	MR35	MR420M	MR1735M
24	100	NTPR-24-4L	32	162.	NTPR-24-4M	220.	MR38	MR424M	MR1738M
28	100	NTPR-28-4L	35	179.	NTPR-28-4M	238.	MR41	MR428M	MR1741M
32	200	NTPR-32-4L	38	205.	NTPR-32-4M	303.	MR50	MR432MP	MR1750
36	200	NTPR-36-4L	41	222.	NTPR-36-4M	321.	MR53	MR436MP	MR1753
40	200	NTPR-40-4L	44	240.	NTPR-40-4M	338.	MR56	MR440MP	MR1756

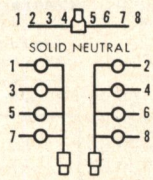
SCHEDULE G1 DISCOUNT SCHEDULE G2 DISCOUNT



Type NTPR-24-3L

TYPE NRP-3

1φ. 3W. S/N A.C. or D.C. Plug Fusible No Switches



MAINS: 125/250 V. A.C. or D.C.
BRANCHES: Single Pole, 30 Amp., 125 V. 2-Wire S/N Plug Fusible
BOXES: 12″ Wide. 4″ Deep. Blue-gray Finish.
FRONTS: Single Door Type with Flush Lock. Blue-gray Finish.
GUTTERS: 4″ Sides, 3½″ Minimum Ends.

No. Branches	Amp. Mains	*Catalog No.	Box Height	List Price
MAINS: LUGS ONLY				
4	60	NRP 04-3L	12½	$ 30.
8	60	NRP 08-3L	16	40.
12	60	NRP 12-3L	21	51.
16	100	NRP 16-3L	24	59.
20	100	NRP 20-3L	25½	69.
24	120	NRP 24-3L	32	80.

SCHEDULE G1 DISCOUNT

***SURFACE OR FLUSH:** When ordering, add suffix letter "S" or "F" to catalog number to indicate surface or flush mounting.

▲BOX HEIGHT is indicated by last two figures of box catalog number.

Handle Lock-Off Device for NTPR; Cat. No. SK-5456; List Price **$1.90** each.

Two-Pole. For NTPR panels with 1 and 2-pole branches, convert to total number of equivalent 1-pole branches and obtain price of panel; then add **$2.20** list for each 2-pole substituted for two single pole branches. Schedule G2 Discount then applies to complete panelboard.

60, 100, 200 A. 2 P. and 200 A. 3 P. main switches are Pull-out type; 60 and 100 A. 3 P. are Saflex type.

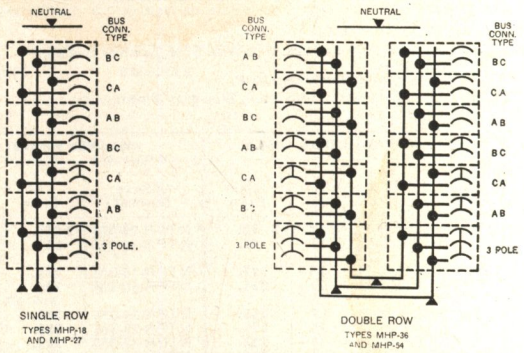
CIRCUIT BREAKER DISTRIBUTION PANELBOARDS

With Plug-In Type MM, M1 and M2 Thermal-Magnetic Circuit Breakers

UNASSEMBLED TYPE

TYPE **MHP** PANELBOARD 240 VOLTS A. C.

3φ. 4W. S/N 120/208 V. A.C.
3φ. 3W. 240 V. A.C.
***1φ. 3W. S/N 120/240 V. A.C.**
***1φ. 2W. 240 V. A.C.**



MAINS: LUGS ONLY

BRANCHES: Single Pole 15 to 50 A. 120 V. A.C.
Two Pole 15 to 100 A. 240 V. A.C.
Three Pole 15 to 100 A. 240 V. A.C.

BOXES: Galvanized Steel.
Single Row — 14″ Wide, 5¾″ Deep.
Double Row—20″ Wide, 5¾″ Deep.

FRONTS: Trim with Door and Flush Lock. Blue-gray Finish.

WIRING GUTTERS: Single Row—4″ End and Side Gutters.
Double Row—6″ End Gutters; 4″ Side Gutters.

SELECTION OF COMPONENTS

1. List required circuits (ampere rating and poles).
2. Determine TOTAL breaker mounting space required from BREAKER MOUNTING SPACE dimensions under "PLUG-IN BREAKERS" table. Include BREAKER MOUNTING SPACE for planned future circuits.
3. Select interior from "INTERIOR BOX AND FRONT" table on basis of TOTAL "BREAKER MOUNTING SPACE" required. Corresponding box and front are also listed in this table.
4. Select required breakers from "PLUG-IN BREAKERS" table. Refer to footnotes at bottom of page for proper single pole and two pole bus connection types for single phase and three phase mains.

INTERIORS, BOXES AND FRONTS

Total Breaker Mounting Space (Inches)	Amp. Rating of Mains	Type	Complete List Price (Less Breakers) List Price	Breaker Rows	Box Width (Inches)	Box Height (Inches)	COMPONENT ORDERING TABLES: Interior Assembly (Less Breakers) Catalog Number	Interior Assembly (Less Breakers) List Price	Front Catalog Number	Front List Price	Box Catalog Number	Box List Price
18	200	MHP-18	**$ 92.**	Single	14	33	MHP-4218 †	**$ 58.**	P-1433F or S	**$ 22.**	P-33	**$ 12.**
27	200	MHP-27	**107.**	Single	14	42	MHP-4227 †	**68.**	P-1442F or S	**25.**	P-42	**14.**
36	400	MHP-36	**173.**	Double	20	41	MHP-4436	**102.**	DF-142F or S	**43.**	MH-41	**28.**
54	400	MHP-54	**194.**	Double	20	50	MHP-4454	**112.**	DF-151F or S	**49.**	MH-50	**33.**

PLUG-IN BREAKERS

Amp. Trip Rating	*2 SINGLE POLES: Breaker Mounting Space	Bus Connection AB Catalog Number	BC Catalog Number	CA Catalog Number	List Price	2 POLE: Breaker Mounting Space	Bus Connection AB Catalog Number	BC Catalog Number	CA Catalog Number	List Price	3 POLE: Breaker Mounting Space	Catalog Number	List Price
15	2″	MHAB-115	MHBC-115	MHCA-115	**$10.80**	2″	MHAB-215	MHBC-215	MHCA-215	**$ 25.**	3″	MH-315	**$ 35.**
20		MHAB-120	MHBC-120	MHCA-120	**10.80**		MHAB-220	MHBC-220	MHCA-220	**25.**		MH-320	**35.**
30		MHAB-130	MHBC-130	MHCA-130	**10.80**		MHAB-230	MHBC-230	MHCA-230	**25.**		MH-330	**35.**
40		MHAB-140	MHBC-140	MHCA-140	**10.80**		MHAB-240	MHBC-240	MHCA-240	**25.**		MH-340	**35.**
50		MHAB-150	MHBC-150	MHCA-150	**10.80**		MHAB-250	MHBC-250	MHCA-250	**25.**		MH-350	**35.**
70						3″	MHAB-270	MHBC-270	MHCA-270	**$ 36.**	4½″	MH-370	**$ 48.**
100							MHAB-216	MHBC-216	MHCA-216	**36.**		MH-316	**48.**

***SINGLE PHASE THREE WIRE** mains are accommodated by selecting breaker units having Type CA bus connections, wherein connections are made to the two outside bus bars only.

THREE PHASE FOUR WIRE "WYE" mains arrangement is a standard feature. See **distributed phase** paragraph for sequence phase connections of single-pole and two-pole branches.

THREE PHASE FOUR WIRE "DELTA" mains can be accommodated. The neutral on three phase four wire "Delta" systems is generally derived by center tapping one of the transformer phases. For this application, all single-pole and two-pole branches requiring a neutral are connected to the two outside bus bars through the use of breaker units having Type CA bus connections. The third bus bar (center bus) would be used only for 3-pole breakers in this system.

DISTRIBUTED PHASE bus connections for single pole or two pole branches are available by selecting proper assortment of Type AB, BC, and CA breaker units to provide sequence phase connections (see bus connection diagrams at top of page.

SUBFEED LUGS package assembly kits are available for adding a second set of lugs to the panelboards:
SK-4052—200 A. lugs for MHP-18 and MHP-27 ..... **$ 15.** list
SK-4053—400 A. lugs for MHP-36 and MHP-54 ..... **20.** list

***HANDLE TIE** can be used for converting two single poles to a double pole individual trip breaker. Cat. No. 40HT, List Price ..... **$ .10** each

†APPROVED FOR SERVICE ENTRANCE USE with six circuits or less.

HANDLE LOCK-OFF DEVICES:
Single Pole 15 to 50 A.—Cat. No. SK-5400; List Price **$0.70** each
Two Pole 15 to 50 A.—Cat. No. SK-5453; List Price **$1.90** each
Three Pole 15 to 50 A.—Cat. No. SK-5454; List Price **$1.90** each
Two Pole 70 and 100 A.—Cat No. SK-5455; List Price **$3.60** each
Three Pole 70 and 100 A. Cat. No. SK-5455; List Price **$3.60** each

EXAMPLE ESTIMATE
120/208V. 3φ, 4W. SERVICE
200A. MAIN LUGS — FLUSH MTG.

Breaker Space	Components		Unit List Price	Total List Price
4″	4—20A. 1P.	1—MHAB-120	**$ 10.80**	**$ 10.80**
		1—MHBC-120	**10.80**	**10.80**
18″	6—40A. 3P.	6—MH-340	**35.**	**210.**
4½″	1—70A. 3P.	1—MH-370	**48.**	**48.**
26½″	1—27″ Interior 1—Flush Front 1—Box	1—MHP-27	**107.**	**107.**
		Total List Price		**$386.60**

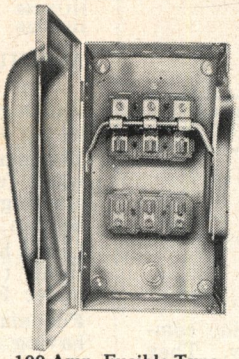
SCHEDULE G1 DISCOUNT

BULLDOG MASTER SAFETY SWITCHES
BullDog Vacu-Break® Type

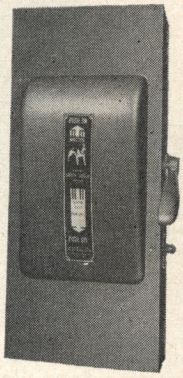
SINGLE THROW—FUSIBLE GRAY FINISH OPTIONAL COVER INTERLOCK



30 A. to 200 A. switches are front operated.



100 Amp. Fusible Type with cabinet open.



400 A. and larger switches are side operated and have back wiring space provision.

Terminals are BullDog Solderless Wire Grips; one per pole on 30 to 400 ampere sizes. Two Wire Grips per pole (for 500 MCM cable each) and 600 and 800 ampere and 4 per pole on 1200 ampere; both line and Load.

Higher conditional Hp ratings are applicable only when appropriate dual element fuses for the starting characteristics of the motor are used as provided in paragraph 4346 of the National Electrical Code.

To obtain maximum switch performance use only fuses having lowest possible operating temperatures. Switches NF-351, NF-352, SN-321, SN-421 and F-321 are shipped 5 to a carton.

Listed by Underwriters as "Enclosed Switches" (also "Suitable for use as Service Entrance Equipment") under File E4776.

FUSIBLE—240 VOLTS AC—250 VOLTS DC—SINGLE THROW

***2 Pole, 2 Blade, 2 Fuse**

	H.P. Rating 240 V. AC		250 V. DC				
Amp.	Standard	Maximum	Standard	Maximum	Cat. No.	Wt. Lbs. Each	Price Each
30	1½	3	5	...	▲SN-321	7	$16.30
60	3	10	10	...	SN-322	12	30.00
100	7½	15	20	...	SN-323	23	48.00
200	15	25	40	...	SN-324	43	85.00
400	..	..	50	...	SN-325	142	200.00
600	..	..	..	...	SN-326	178	375.00
800	..	..	..	...	†SN-327	370	593.00
1200	..	..	..	...	†SN-328	381	839.00
			3 Pole, 3 Blade, 3 Fuse				
30	3	7½	5	...	▲F-321	8	$19.90
60	7½	15	10	...	F-322	12	35.00
100	15	30	20	...	F-323	23	55.00
200	25	50	40	...	F-324	44	95.00
400	50	..	50	...	F-325	153	221.00
600	..	..	..	...	F-326	185	399.00
800	..	..	..	...	F-327	370	737.00
1200	..	..	..	...	F-328	381	943.00
			4 Pole, 4 Blades, 4 Fuse 240 V. AC				
30	3	10	..	...	F-421	14	$39.00
60	7½	20	..	...	F-422	14	54.00
100	15	30	..	...	F-423	23	85.00
200	30	50	..	...	F-424	47	154.00
400	50	..	..	...	F-425	192	293.00
600	..	..	..	...	F-426	231	527.00

FUSIBLE—240 VOLTS AC—250 VOLTS DC—SINGLE THROW—SOLID NEUTRAL TYPE

3 Pole, 2 Blade, 2 Fuse 125/250 V.; 240 V. AC 3 Phase

	H.P. Rating 240 V. AC		250 V. DC				
Amp.	Standard	Maximum	Standard	Maximum	Cat. No.	Wt. Lbs. Each	Price Each
30	3	7½	5	...	▲SN-321	7	$16.30
60	7½	15	10	...	SN-322	12	30.00
100	15	30	20	...	SN-323	23	48.00
200	25	50	40	...	SN-324	43	85.00
400	50	..	50	...	SN-325	142	200.00
600	..	..	..	...	SN-326	178	375.00
800	..	..	..	...	†SN-327	370	593.00
1200	..	..	..	...	†SN-328	381	839.00
			4 Pole, 3 Blade, 3 Fuse 240 V. AC				
30	3	7½	..	...	▲SN-421	8	$19.90
60	7½	15	..	...	SN-422	12	35.00
100	15	30	..	...	SN-423	23	55.00
200	25	50	..	...	SN-424	44	95.00
400	50	..	..	...	SN-425	180	245.00
600	..	..	..	...	SN-426	223	422.00
800	..	..	..	...	†SN-427	379	1064.00
1200	..	..	..	...	†SN-428	390	1306.00

600 VOLTS FUSIBLE — SINGLE THROW

***2 Pole, 2 Blade, 2 Fuse 600 V. AC**

Amps.	Horse Power Rating Std.	Maximum	Cat. No.	Wt. Lbs. Each	Price Each
30	3	10	F-351	12	$35.00
60	10	25	F-352	15	42.00
100	15	40	F-353	23	76.00
200	30	..	F-354	44	114.00
400	..	..	F-355	154	292.00
600	..	..	F-356	186	495.00
	3 Pole, 3 Blades, 3 Fuse 600 V. AC				
30	7½	20	F-351	12	$35.00
60	15	50	F-352	15	42.00
100	30	50	F-353	23	76.00
200	50	..	F-354	44	114.00
400	..	..	F-355	154	292.00
600	..	..	F-356	186	495.00
800	..	..	F-357	370	855.00
1200	..	..	F-358	410	1125.00

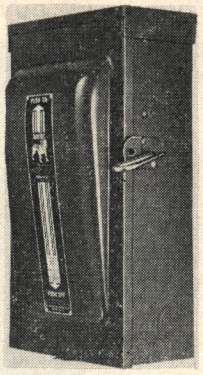
NOT FUSIBLE—SINGLE THROW

3 Pole 240, 480 or 600 V. AC and 250 DC

	H.P. Rating 240 V.	480 V.	600 V.	250 V.			
Amps.	AC	AC	AC	DC	Cat. No.	Wt. Lbs. Each	Price Each
30	7½	15	20	5	▲NF-351	7	$18.00
60	15	30	50	10	▲NF-352	7	33.00
100	30	50	50	20	NF-353	22	51.00
200	50	50	50	40	NF-354	42	79.00
400	..	..	..	...	NF-355	132	178.00
600	..	..	..	...	†NF-356	183	315.00
800	..	..	..	...	†NF-357	367	642.00
1200	..	..	..	...	†NF-358	407	862.00

*For 2 pole applications, 3 pole switches are used by wiring two fused poles only and ignoring the third pole.
†Only available on special order. NOT CARRIED IN STOCK.
NOTE: When ordering SN-327, SN-328, SN-427, SN-428 specify GROUNDED or GROUNDABLE NEUTRAL.
▲ Packaged 5 to a carton.

BULLDOG RAINTIGHT CLAMPMATIC® VACU-BREAK® SAFETY SWITCHES



U. L. LISTED "RAINTIGHT"

NEMA TYPE 3

BullDog Raintight Safety Switches provide complete protection from Rain, Sleet and Snow. They are Underwriters' Laboratories Listed as "Raintight". Also listed by Underwriters' as "Enclosed Switches" (Also suitable for use as "Service Equipment") under File E-4776, and are Nema Type 3. Other features include Vacu-Break Arc Control, Clampmatic Action, Horsepower Rated, Provisions for simple installation of Conduit Hubs, Handles can be locked or sealed in "ON" or "OFF" position, Slotted Cover to prevent accidental closing in "Open" position. BullDog Raintight Vacu-Break Clampmatic Safety Switches are manufactured in 30, 60, 100 and 200 ampere sizes in 240 volts (3 P. Fused, 3P. and 4P. Solid Neutral) and 600 volts (3P. Fused and 3P. No-Fuse). Hubs are NOT supplied with BullDog Raintight Switches. Switches have removable plates at top of boxes to allow use of Hubs where required.

240 VOLTS AC—FUSIBLE—250 VOLTS DC

			Horsepower Ratings					
		Voltage	240 V. AC.			250 V. DC.		
		Phases	1	2	3	—		
		Wires	2	4	3	2		
Amps.	Cat. No.	List Price / Approx. Wt. Lbs.	Std. Max.	Std. Max.	Std. Max.	Std.	Max.	
**SOLID NEUTRAL TYPE 3 POLE, 2 FUSE & SOLID NEUTRAL								
30	NR-321	$12.50	10	1½	3	3	7½	5
60	NR-322	23.20	14	3	10	7½	15	10
100	NR-323	35.00	23	7½	15	15	30	20
200	NR-324	80.00	44	15	—	25	50	40
4 POLE, 3 FUSE & SOLID NEUTRAL								
30	NR-421	$19.00	10			3	7½	
60	NR-422	29.00	14			7½	15	
100	NR-423	54.00	23			15	30	
200	NR-424	97.00	44			25	50	
FUSIBLE 3 POLE, 3 FUSE								
30	FR-321	$19.00	10	1½	3	3	7½	5
60	FR-322	29.00	14	3	10	7½	15	10
100	FR-323	54.00	23	7½	15	15	30	20
200	FR-324	97.00	44	15	—	25	50	40
NOT FUSIBLE 3 POLE, NO FUSE								
30	NFR-351	$33.00	9	3		7½		5
60	NFR-352	57.00	13	10		15		10
100	NFR-353	81.00	22	15		30		20
200	NFR-354	97.00	43	30		50		40
480 VOLTS—FUSIBLE—600 VOLTS 3 POLE, 3 FUSE								
30	FR-351	$59.00	10	3	7½	5	15	3	10	7½	20
60	FR-352	70.00	14	5	20	15	30	10	25	15	40
100	FR-353	108.00	23	10	30	25	50	15	40	30	50
200	FR-354	149.00	44	25	..	50	..	30	..	50	..
**NOT FUSIBLE 3 POLE, NO FUSE											
30	NFR-351	$33.00	9	7½	15	10	20				
60	NFR-352	57.00	13	20	30	25	40				
100	NFR-353	81.00	22	30	50	40	50				
200	NFR-354	97.00	43	50	50	50	50				

** For 2 Pole applications, 3 Pole switches are used by wiring two outside poles only and ignoring the third pole.

REMOVABLE HUBS

HUBS are NOT supplied with BullDog Raintight Switches. These devices may be ordered from the following table.

Cat. No.	List Each	Conduit Size	
HU1-075	$2.40	¾ inch	Adapted for 30-60-100A. switches.
HU1-100	2.40	1 inch	
HU1-125	2.40	1¼ inch	
HU1-150	2.40	1½ inch	
HU1-200	4.00	2 inch	
HU2-200	4.00	2 inch	Adapted only for 200A. switches.
HU2-250	7.10	2½ inch	

ALL HUBS ARE PACKAGED 5 TO A STANDARD PACKAGE CARTON

BullDog Raintight Switches have removable plates at top of boxes to allow use of Hubs where required.

The maximum Horsepower ratings are applicable when fuses having time delay appropriate for the starting characteristics of the motor are used. (See Section 4346 of the National Electrical Code.)

Listed by Underwriters' as "Enclosed Switches Raintight" (also suitable for use as "Service Equipment") under File E-4776.

For maximum switch performance use only fuses having lowest possible operating temperatures.

BULLDOG JUNIOR VACU-BREAK® SAFETY SWITCHES

GENERAL PURPOSE TYPE
30 Ampere to 600 Ampere
250 Volts — Cartridge Fusible



The Vacu-Break chamber in these switches prevents excessive arcing, which causes burning and pitting of contacts, thereby eliminates switch maintenance. Positive make and positive break is assured with Clampmatic Contacts.

Pressure wire connectors are supplied and generous wiring space is provided. Front operating handle, and operating bail. Spring reinforced fuse clips, and ample and conveniently located knockouts facilitate speedier installation.

Switches JN-321, JF-321, and JN-421 are packaged and shipped five to a carton.

Fusible

Amps.	Cat. No.	Wt. Lbs.	List Price	Amps.	Cat. No.	Wt. Lbs.	List Price
	2 Pole, 2 Fuse				3 Pole, 3 Fuse		
30	JN-321*	6	$ 8.60	30	JF-321*	6	$ 13.10
60	JN-322	10	14.90	60	JF-322	9	20.80
100	JN-323	15	30.00	100	JF-323	15	38.00
200	JN-324	40	59.00	200	JF-324	41	81.00
400	JN-325	142	166.00	400	JF-325	148	178.00
600	JN-326	173	333.00	600	JF-326	179	356.00

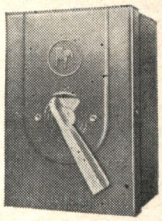
Fusible with Insulated Groundable Neutral

	3 Pole, 2 Fuse & S/N				4 Pole, 3 Fuse & S/N		
30	JN-321*	6	$ 8.60	30	JN-421*	6	$ 13.10
60	JN-322	10	14.90	60	JN-422*	10	20.80
100	JN-323	15	30.00	100	JN-423*	16	38.00
200	JN-324	40	59.00	200	JN-424*	43	81.00
400	JN-325	142	166.00	400	JN-425	177	202.00
600	JN-326	173	333.00	600	JN-426	222	380.00

*Grounding neutral can be readily effected as bonding screw is provided. All other solid neutral switches can be quickly grounded from a wire terminal mounted on neutral bar of switch.

BULLDOG FRONT OPERATED SAFETY SWITCHES

ROTOR TYPE—30 AMPERE



This switch has strong, steel handles and double break contacts to reduce arcing. Wiping action assures clean contact surfaces.

The cabinets are small enough to be practical in limited areas—but large enough to provide generous wiring space. Ample number of knockouts. Used to control and protect lighting circuits, oil burners, refrigeration equipment, air conditioning units, drill presses and similar service equipment.

Rotor Type Switches packed and shipped 10 to a carton, carton weight 33 lbs.

Fusible — Without Neutral

No. and Type of Fuse	Cat. No.	Volts	List Price
		2 Pole (2 Fuse)	
2 Plug	RF-211	120 AC, 125 DC, 125-150 ...	$5.60
2 Cart.	RF-221	240 AC, 250 DC	6.70

Fusible with *Insulated Groundable Neutral

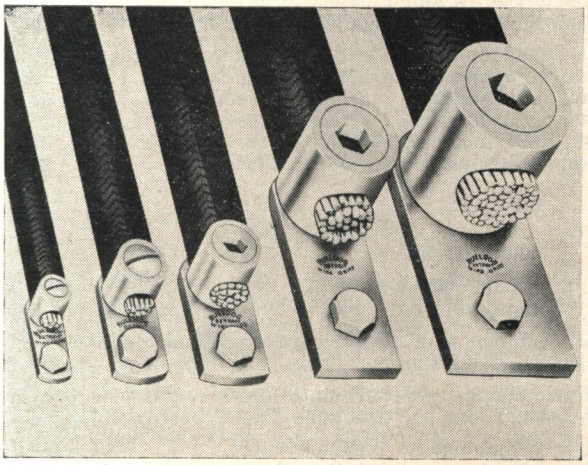
2 Pole (1 Fuse and Solid Neutral)

1 Plug	RN-211	120 AC, 125 DC	$4.50
		3 Pole (2 Fuse and Solid Neutral)	
2 Plug	RN-311	120 AC, 125 DC, 125-250 ..	5.90
2 Cart.	RN-321	240 AC, 125-250	7.60

*Grounding neutral can be readily effected as bonding screw is provided.

BULLDOG WIRE GRIPS

Full Contact Pressure Connectors

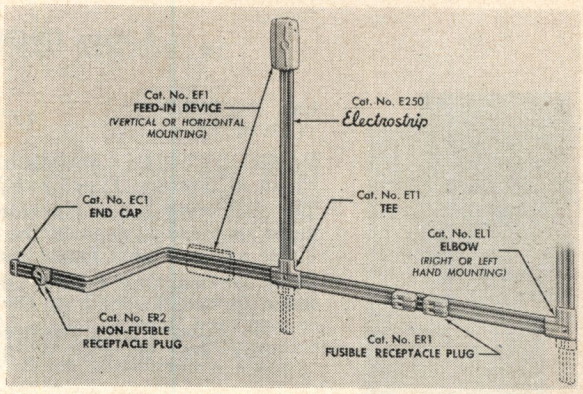


Cat. No.	Carton Quantity	Wt. Lbs. Carton Qty.	List Each
3021	100	3	$0.26
3031	50	2½	.58
3041	25	3	1.20
3052	10	5½	2.80
3062	6	9	7.50

BULLDOG ELECTROSTRIP®

Listed by Underwriters' Laboratories, Inc.

20 AMPERES—2 WIRE, 125 VOLTS A.C.



Bulldog Electrostrip is a new type of wiring for homes, hotels, plants, offices, hospitals, schools and stores. It gives electrical connections where they are needed, providing freedom from fixed electrical outlets. It can be mounted on baseboard, work benches, walls, display counters, etc. Hand forms to corners and irregularities. Eliminates extension cord fire hazards. Electrostrip is a flexible, ivory colored plastic electrical molding, easily installed. Handy, movable receptacle plugs, inserted anywhere along its length, give connections for lights, small electric tools and machines, electric typewriters, dictaphones, or any other electrical device used in industrial plants, commercial buildings and institutions.

Electrostrip

Cat. No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per Coil
E-250	250 Ft. Coil	40	$122.50
E-100	100 Ft. Coil	16	54.00

20 Amp., 2 wire (#12 Wire) 125 volt A.C. Ivory colored plastic, can be painted as desired. Electrostrip is 1¼ inches wide x 7/32 inch deep.

Fittings

No. EF1 Feed-In Device—20 amp., 125 volts A.C., used either as End or Center Feed. Ivory colored plastic, 2¾ inches high x 4½ inches long x 1 inch deep. Standard package, 50; weight standard package, 20 lbs. ..... each $2.00

No. EC1 End Cap—For enclosing and securing Electrostrip Runs. Ivory colored plastic, $1\frac{15}{32}$ inches high x $\frac{7}{16}$ inch deep. Standard package, 100; weight standard package, 3 lbs. ..... each $0.20

No. ER1 Fusible Receptacle Plug—15 amp., 125 volts A.C. Polarized for proper insertion with provision for fusing the ungrounded conductor. 6 Amp., ¼ x 1¼-inch 250-volt cartridge fuse included. Ivory colored plastic, 1¼ inches high x 2 inches long x ⅞ inch deep. Standard package, 100; weight standard package, 10 lbs. ..... each $1.20

No. ER2 Non-Fusible Receptacle Plug—15 Amp., 125 volts A.C. 1¼ inches high x 1⅜ inches long x 57/64 inch deep. Standard package 100; weight standard package, 6 lbs. .....each $0.60

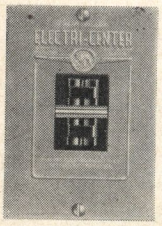
No. ETI Tee—20 Amp., 125 volts A.C. For vertical or horizontal mounting. Ivory colored plastic $2\frac{5}{16}$ inches high x 3⅛ inches long x $\frac{13}{32}$ inch deep. Standard package 50; weight standard package 5 lbs. ..... each $1.60

No. EL1 Elbow—20 Amp., 125 volts A.C. For right or left hand mounting. Ivory colored plastic $2\frac{5}{16}$ inches high x $2\frac{5}{16}$ inches long x $\frac{13}{32}$ inch deep Standard package 50; weight standard package, 4 lbs. .... each $1.00

BULLDOG *Pushmatic*® ELECTRI-CENTERS®

3 Wire, 120/240V. AC — Insulated (Groundable) Neutral

2000 LINE



Cat. No. 2000F (Flush Type) — **2 Circuits (Max.)** 40 Amp. Mains — **Cat. No. 2000S** (Surface Type)

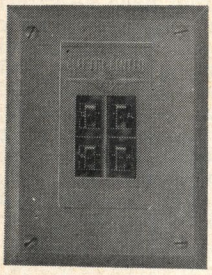
	2000F	2000S
BASIC DEVICE: Consists of Box, Interior and Front (Specify Flush or Surface Type) but NO Pushmatics	$3.60	$3.00

The following prices include the Basic Device and Pushmatic units required to provide the circuits indicated. These Pushmatic Units are available from Distributors Stock;

Basic Device, One 1-Pole Circuits, 1 Pushmatic	$6.40	$5.80
Basic Device, Two 1-Pole Circuits, 2 Pushmatics	9.20	8.60

No Filler Plates required: Front has Twist-Out.
Box: 6⅛" H., 4⅛" W., 3" D. Std. Pkg. 10, weight 25 lbs.

4000 LINE



Cat. No. 4000F (Flush Type) — **4 Circuits (Max.)** 50 Amp. Mains — **Cat. No. 4000S** (Surface Type)

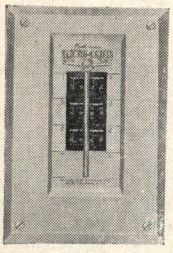
BASIC DEVICE: Consists of Box, Interior and Front (Specify Flush or Surface Type) but NO Pushmatics **$6.00**

The following prices include the Basic Device and Pushmatic units required to provide the circuits indicated. These Pushmatic Units are available from Distributor's Stock:

Basic Device, One 1-Pole Circuit, 1 Pushmatic	$8.80
Basic Device, Two 1-Pole Circuits, 2 Pushmatics	11.60
Basic Device, Three 1-Pole Circuits, 3 Pushmatics	14.40
Basic Device, Four 1-Pole Circuits, 4 Pushmatics	17.20

No Filler Plates required: Front has Twist-Outs.
Box: 8¼" H., 6" W., 3¼" D. Std. Pkg. 10, Wgt. 55 lbs.

6000 LINE



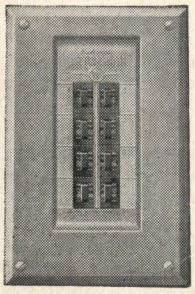
Cat. No. 6000F (Flush Type) — **6 Circuits (Max.)** 70 Amp. Mains — **Cat. No. 6000S** (Surface Type)

BASIC DEVICE: Consists of Box, Interior and Front (Specify Flush or Surface Type) but NO Pushmatics or Filler Plates **$6.60**

The following prices include the Basic Device and Pushmatic units required to provide the circuits indicated. These Pushmatic Units are available from Distributor's Stock:

Basic Device, One 1 Pole Circuit, 1 Pushmatic, 5 Filler Plates	$9.90
Basic Device, Two 1 Pole Circuits, 2 Pushmatics, 4 Filler Plates	12.60
Basic Device, Three 1 Pole Circuits, 3 Pushmatics, 3 Filler Plates	15.30
Basic Device, Four 1 Pole Circuits, 4 Pushmatics, 2 Filler Plates	18.00
Basic Device, Five 1 Pole Circuits, 5 Pushmatics, 1 Filler Plate	20.70
Basic Device, Six 1 Pole Circuits, 6 Pushmatics, No Filler Plates	23.40

8000 LINE



Cat. No. 8000F (Flush Type) — **8 Circuits (Max.)** 70 Amp. Mains — **Cat. No. 8000S** (Surface Type)

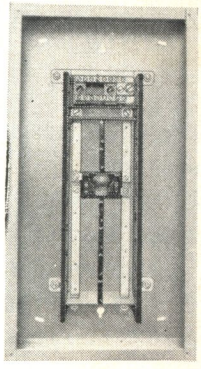
BASIC DEVICE: Consists of Box, Interior and Front (Specify Flush or Surface Type) but NO Pushmatics or Filler Plates **$10.40**

The following prices include the Basic Device and Pushmatic units required to provide the circuits indicated. These Pushmatic Units are available from Distributor's Stock:

Basic Device, One 1 Pole Circuit, 1 Pushmatic, 7 Filler Plates	$13.90
Basic Device, Two 1 Pole Circuits, 2 Pushmatics, 6 Filler Plates	16.60
Basic Device, Three 1 Pole Circuits, 3 Pushmatics, 5 Filler Plates	19.30
Basic Device, Four 1 Pole Circuits, 4 Pushmatics, 4 Filler Plates	22.00
Basic Device, Five 1 Pole Circuits, 5 Pushmatics, 3 Filler Plates	24.70
Basic Device, Six 1 Pole Circuits, 6 Pushmatics, 2 Filler Plates	27.40
Basic Device, Seven 1 Pole Circuits, 7 Pushmatics, 1 Filler Plate	30.10
Basic Device, Eight 1 Pole Circuits, 8 Pushmatics, No Filler Plates	32.80

BULLDOG *Pushmatic*® ELECTRI-CENTERS®

3 WIRE, SOLID NEUTRAL, 120-240V. AC

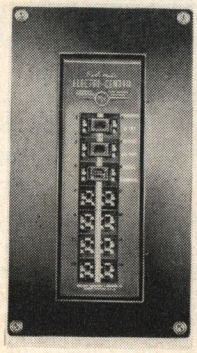


XD LINE

BASIC DEVICE: Consists of Box, Interior and Front (Specify Flush or Surface Type), One 2-Pole common trip 50 Amp. Main Lighting Pushmatic, but NO branch circuit Pushmatics or Filler Plates.

Prices in the tables below include the Basic Device plus the additional Pushmatic Units and Filler Plates required to provide the circuits indicated. These additional Pushmatics and Filler Plates are obtainable from Distributor's stock.

Split Bus for Separate Lighting and Appliance Circuits.
A Lighting Section for 1 Pole 120 V. AC. Pushmatics.
A Section for Range, or other Appliance Circuits 2 Pole 120-240 V. AC.



12 BRANCH CIRCUITS (Max.)

100 Amp.-Mains

Cat. No. XD-12-3F (Flush Type) — **Cat. No. XD-12-3S** (Surface Type)

List Price, Basic Device..... $29.00

XD-12-3F or XD-12-3S

Total 1 Pole** Branch Circuits	Additional Pushmatics Required	Filler Plates Required	Total List Price
1	1	11	**$32.90**
2	2	10	**35.60**
3	3	9	**38.30**
4	4	8	**41.00**
5	5	7	**43.70**
6	6	6	**46.40**
7	7	5	**49.10**
8	8	4	**51.80**
9	9	3	**54.50**
10	10	2	**57.20**
11	11	1	**59.90**
12	12	..	**62.60**

**** 2 POLE CIRCUITS**

The XD-12-3 Panel has space and provisions for installing two 2 Pole circuits above the Main Lighting Circuit. 2 Pole circuits may also be installed below the Main Lighting Circuit if space permits. 2 Pole Common Trip Pushmatics provide the two pole circuits required. Above prices are based on the use of Single Pole Pushmatics. For each 2 Pole Common Trip Pushmatic desired, add **$.70** to Complete Device Price.

Box Size: 20¼" H., 10¾" W., 3¾" D.

Cat. No.	Type	Std. Pkg.	Std. Pkg. Wt.
XD-12-3F	Flush	1	19#
XD-12-3S	Surface	1	19#

18 BRANCH CIRCUITS (Max.)

100 Amp.-Mains

Cat. No. XD-18-3F (Flush Type) — **Cat. No. XD-18-3S** (Surface Type)

List Price, Basic Device..... $36.80

XD-18-3F or XD-18-3S

Total 1 Pole** Branch Circuits	Additional Pushmatics Required	Filler Plates Required	Total List Price
1	1	17	**$41.30**
2	2	16	**44.00**
3	3	15	**46.70**
4	4	14	**49.40**
5	5	13	**52.10**
6	6	12	**54.80**
7	7	11	**57.50**
8	8	10	**60.20**
9	9	9	**62.90**
10	10	8	**65.60**
11	11	7	**68.30**
12	12	6	**71.00**
13	13	5	**73.70**
14	14	4	**76.40**
15	15	3	**79.10**
16	16	2	**81.80**
17	17	1	**84.50**
18	18	..	**87.20**

**** 2 POLE CIRCUITS**

The XD-18-3 Panel has space and provisions for installing four 2 Pole circuits above the Main Lighting Circuit. 2 Pole circuits may also be installed below the Main Lighting Circuit if space permits. 2 Pole Common Trip Pushmatics provide the two pole circuits required. Above prices are based on the use of Single Pole Pushmatics. For each 2 Pole Common Trip Pushmatic desired, add **$.70** to Complete Device Price.

Box Size: 24¼" H., 10¾" W., 3¾" D.

Cat. No.	Type	Std. Pkg.	Std. Pkg. Wt.
XD-18-3F	Flush	1	22#
XD-18-3S	Surface	1	22#

BULLDOG *Pushmatic*® ELECTRI-CENTERS®

PI LINE

BASIC DEVICE: Consists of Box, Interior and Front (Specify Flush or Surface Type) but NO Pushmatics, or Filler Plates.

Prices in the tables below include the Basic Device plus the additional Pushmatic Units and Filler Plates required to provide the circuits indicated. These additional Pushmatics and Filler Plates are obtainable from Distributor's stock.

1 PHASE, 3 WIRE, SOLID NEUTRAL, 120-240V. AC

100 Amp.-Mains

14 BRANCH CIRCUITS (Max.)

Cat. No. P1-14-3LF (Flush Type)	Cat. No. P1-14-3LS (Surface Type)		
List Price, Basic Device			**$14.00**
Total 1 Pole Branch Circuits	Pushmatics Required	Filler Plates Required	Total List Price
1	1	13	$18.10
2	2	12	20.80
3	3	11	23.50
4	4	10	26.20
5	5	9	28.90
6	6	8	31.60
7	7	7	34.30
8	8	6	37.00
9	9	5	39.70
10	10	4	42.40
11	11	3	45.10
12	12	2	47.80
13	13	1	50.50
14	14	..	53.20

20 BRANCH CIRCUITS (Max.)

Cat. No. P1-20-3LF (Flush Type)	Cat. No. P1-20-3LS (Surface Type)		
List Price, Basic Device			**$26.00**
1	1	19	$30.70
2	2	18	33.40
3	3	17	36.10
4	4	16	38.80
5	5	15	41.50
6	6	14	44.20
7	7	13	46.90
8	8	12	49.60
9	9	11	52.30
10	10	10	55.00
11	11	9	57.70
12	12	8	60.40
13	13	7	63.10
14	14	6	65.80
15	15	5	68.50
16	16	4	71.20
17	17	3	73.90
18	18	2	76.60
19	19	1	79.30
20	20	..	82.00

3 PHASE, 4 WIRE, SOLID NEUTRAL, 120-208V.

100 Amp.-Mains

14 BRANCH CIRCUITS (Max.)

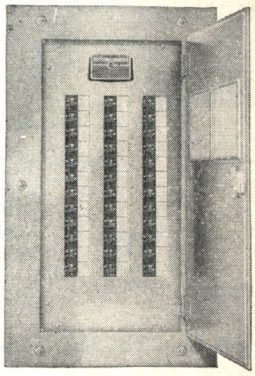
Cat. No. P1-14-4LF (Flush Type)	Cat. No. P1-14-4LS (Surface Type)		
List Price, Basic Device			**$26.80**
1	1	13	$30.90
2	2	12	33.60
3	3	11	36.30
4	4	10	39.00
5	5	9	41.70
6	6	8	44.40
7	7	7	47.10
8	8	6	49.80
9	9	5	52.50
10	10	4	55.20
11	11	3	57.90
12	12	2	60.60
13	13	1	63.30
14	14	..	66.00

20 BRANCH CIRCUITS (Max.)

Cat. No. P1-20-4LF (Flush Type)	Cat. No. P1-20-4LS (Surface Type)		
List Price, Basic Device			**$34.60**
1	1	19	$39.30
2	2	18	42.00
3	3	17	44.70
4	4	16	47.40
5	5	15	50.10
6	6	14	52.80
7	7	13	55.50
8	8	12	58.20
9	9	11	60.90
10	10	10	63.60
11	11	9	66.30
12	12	8	69.00
13	13	7	71.70
14	14	6	74.40
15	15	5	77.10
16	16	4	79.80
17	17	3	82.50
18	18	2	85.20
19	19	1	87.90
20	20	..	90.60

Door is optional for above panels. If enclosing door with locking provisions is desired, specify Cat. No. **PMD-20** for 14 Circuit Device at **$8.50**; or Cat. No. **PMD-24** for 20 Circuit Device at **$9.50**. Std. Pkg. 5.

BULLDOG PUSHMATIC® ELECTRI-CENTERS®



TYPE "P3B" PUSHMATIC ELECTRI-CENTERS

Complete Factory Assembled

Supplied in assemblies of 3 vertical rows — one vertical row per phase — for perfectly balanced 3 phase 4 wire sequence phasing. Available in assemblies from 12 to 42 circuits, with main lugs or main breaker. Cabinets of Code gauge steel are 20 inches wide with 4-inch wiring gutters.

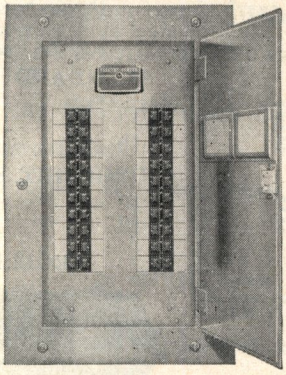
3 Phase, 4 Wire Solid Neutral—120/208V. AC

Cat. No.	Ampere Mains	Branch Circuits	List Each
P3B12-4L	100	12	$131.00
P3B15-4L	100	15	146.00
P3B18-4L	100	18	161.00
P3B21-4L	100	21	176.00
P3B24-4L	100	24	191.00
P3B27-4L	100	27	206.00
P3B30-4L	100	30	221.00
P3B33-4L	200	33	243.00
P3B36-4L	200	36	258.00
P3B39-4L	200	39	273.00
P3B42-4L	200	42	288.50

TYPE "P2B" PUSHMATIC ELECTRI-CENTERS

Complete Factory Assembled

Supplied in assemblies from 12 to 40 circuits, 3 wire single phase, solid neutral, with main lugs or main breaker. Ideal for installations requiring compact control center having a minimum height. They have 20-inch wide cabinets with 4-inch wiring gutters.

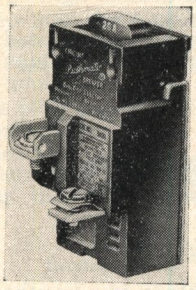


1 Phase, 3-Wire, Solid Neutral, 120/240 V. AC

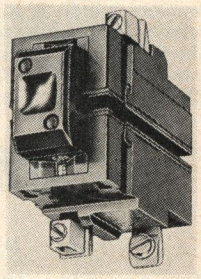
Cat. No.	Ampere Mains	Branch Circuits	List Each
PDB12-3L	100	12	$121.00
PDB14-3L	100	14	131.00
PDB16-3L	100	16	141.00
PDB18-3L	100	18	151.00
PDB20-3L	100	20	161.00
P2B22-3L	200	22	175.00
P2B24-3L	200	24	185.00
P2B26-3L	200	26	195.00
P2B28-3L	200	28	205.00
P2B30-3L	200	30	215.00
P2B32-3L	200	32	225.00
P2B34-3L	200	34	235.00
P2B36-3L	200	36	245.00
P2B38-3L	200	38	255.00
P2B40-3L	200	40	265.00

Prices based on 15 to 50 A. Ultra-Magnetic S.P. Units (Specify ratings). Add for substitution of Ultra-Magnetic with Ambient Compensation—$0.40 per pole. Fronts: Gray enamel finish.

BULLDOG PUSHMATIC® ELECTRI-CENTERS®



BULLDOG DUO-GUARD PUSHMATIC Circuit Breakers 15, 20, 30, 40 and 50 A.



BullDog Duo-Guard Pushmatics are compact, single pole circuit breakers, Underwriters' Approved at 120 volts AC and 120-240 volts AC when a 2 Pole Common Trip Pushmatic is used or two units are joined by a tie handle for a two pole circuit. An identical push of the operating button is all that is required either to switch "ON" or "OFF" or to switch "ON" after automatic trip.

BullDog Pushmatics are available in two types: Ultra Magnetic and Ultra Magnetic with exclusive Ambient Compensation feature. Regardless of type of rating, all Pushmatic units have the same size and contour and are individually interchangeable.

The BullDog mounting rib arrangement makes it easy to assemble Pushmatics in Electri-Centers to meet exact specifications or to interchange units after installation.

Initial insertion, and any removal, replacement and interchanging of Pushmatic units have been simplified as far as good engineering practice will permit. Changes the future may demand on Pushmatic Electric-Centers, alterations to their Pushmatic interior assemblies can be made in a fraction of the time ordinarily required. Completed assemblies will always retain neat, symmetrical appearance of original installation, regardless of changes made.

DUO GUARD (ULTRA-MAGNETIC) PUSHMATICS

Amp. Rating	Without Ambient Compensation Cat. No.	List Each	With Ambient Compensation Cat. No	List Each
15	31115*	$2.80	41115*	$3.20
20	31120*	2.80	41120*	3.20
30	31130†	2.80	41130†	3.20
40	31140†	2.80	41140†	3.20
50	31150†	2.80	41150†	3.20

* Std. Pk. 100.
† Std. Pkg. 50.

TWO POLE (COMMON TRIP) PUSHMATICS

Amperage	Cat. No.	Std. Pkg.	Std. Pkg. Wgt.	List Price (Each)
15A	31215	25	15#	$6.30
20A	31220	25	15#	6.30
30A	31230	25	15#	6.30
40A	31240	25	15#	6.30
50A	31250	25	15#	6.30

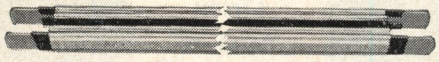
ACCESSORIES

Cat. No.	Description	List Each
PTH-3	2 Pole Tie Handles	$0.30
PFP-2	Blank Filler Plates	.10
PHL-1	Handle Locking Devices	.20
PHL-2	Handle Locking Devices	.30

BULLDOG Trol-E-Duct® Systems

UNIVERSAL TYPE

BullDog Universal Trol-E-Duct is a flexible lighting system which is also suited for feeding small single-phase tools. Essentially it consists of standardized duct sections enclosing two copper bus bars. Plugs and trolleys can tap current from any point along the slotted duct length.



DUCT SECTIONS

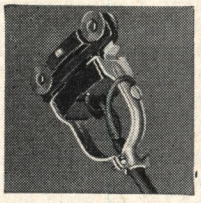
Rated capacity: 50A., 250V. Available in two lengths measured from ends of busbars.

Cat. No.	Length Feet	List Each
D710	10	$14.50
D705	5	11.00

PLUGS AND TROLLEYS



TPG712



RTG712

Terminal type devices are used where connection is likely to be permanent; Receptacle type for easy disconnect.

Plugs 15A., 125V., AC-DC; 20A., 125V., AC

Cat. No.	Description	List Each
TPG712	Terminal	$3.70
PBG711	Terminal (with outlet box)	6.00
RPG713	Receptacle (no cord clamp)	3.10

Trolleys 20A., 250V. AC-DC

TTG712	Terminal	$6.00
TBG711	Terminal (with outlet box)	8.50
RTG712	Receptacle	6.00



WEIGHT SUPPORT

Inserted in the Duct, it supports loads such as lighting fixtures, transformers, etc., up to 75 lbs.

Cat. No. **WS710B**
Weight Support .....each **$0.70**

HANGERS

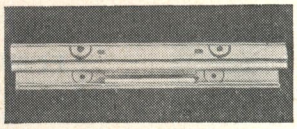
Hanger without hooks is for mounting against ceiling; hooks are for use with messenger service cable.

Cat. No.	Description	List Each
H710-0	No Hooks	$0.20
H210-2	1¼" Hooks	.80
H210-4	3¾" Hooks	.80



BULLDOG Trol-E-Duct® Systems

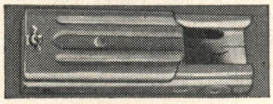
DUCT COUPLINGS



C710

Cat. No.	Type	List Each
C710	Standard, Plain	$3.10
EFB712	End Feed	11.00
FCB712	Center Feed	13.00
TC711	Trolley Entrance	6.00

END CAPS



End Cap TEC210 (illustrated) is for trolley entrance.

Cat. No.	Description	List Each
TEC210	Trolley Entrance	$2.20

INDUSTRIAL TYPE—DUCT SECTIONS



Industrial Trol-E-Duct is a mobile electrical system providing a constant source of electrical power for cranes, hoists, portable tools and other moving loads. It carries current through copper bus bars enclosed in insulated steel duct. Current is collected by trolleys to which are wired the driven equipment.

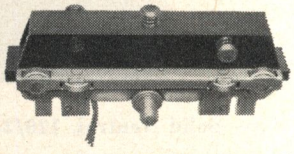
STANDARD SECTION

Poles	Length (Ft.)	Cat. No.	List Each
2	10	TD210	$86.00
3	10	TD310	95.00

DROP-OUT SECTION

2	10	TD210R	$101.00
3	10	TD310R	110.00

TROLLEYS



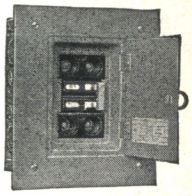
Rating: Trolleys Only, 575 V. or less; Standard type, 30 amp. Heavy Duty type, 60 amp.

Poles	Trolleys Only Cat. No.	Trolleys Only List Each	With Plain Tool Hangers Cat. No.	With Plain Tool Hangers List Each	With Box Tool Hangers Cat. No.	With Box Tool Hangers List Each
			Standard Type			
2	T131	$30.00	T13101	$44.00	T13102	$49.00
3	T331	34.00	T33101	48.00	T33102	53.00
			Heavy Duty			
2	T132	48.00	T13201	62.00	T13202	67.00
3	T332	56.00	T33201	70.00	T33202	75.00

ACCESSORIES

One Hanger and Connector Assembly is included in price of each 10-ft. section.

Cat. No.	Description	
TDH3	Hanger Assembly	$8.00
TDF3	Feed-in Adaptor	14.00
TRB23	End Closer and Bumper	5.00



SE40B3-6S

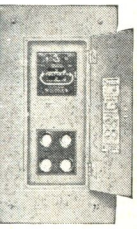
F. A. SERVICE EQUIPMENT
SEQUENCE: METER — CIRCUIT BREAKER

BASES—Made of sections of moulded material assembled on a mounting back.
MAIN CONNECTIONS—For 2 or 3 wire single phase with bonded solid neutral.
MAIN CIRCUIT—Single Pole A. C. type circuit breaker for each single row of plug fuse branches.
LIGHTING BRANCHES—Single Pole plug fuse branch connections for 15 or 20 Amp. 120 volt, 2 wire solid neutral circuits.
BOX—Code thickness galvanized steel.
FRONT—Code thickness furniture steel with dead front. Bonderited and Pearl Gray Finish. Flush or Surface Mounting. Ring catch on door.

15 Amp Brn	Amp. Main Circuit Breaker	Inside Dimensions of Box Wide	High	Deep	Catalog Number Flush Mounting	Surface Mounting	Std. Pkg. Qty.	Approx. Wt. Std. Pkg.
For 3 Wire Service and Main Circuit Breaker Plug Fuse Branches								
4	40	7½	9½	3⅝	SE40B3-4F	SE40B3-4S	4	44
6	40	7½	12½	3⅝	SE40B3-6F	SE40B3-6S	4	48
8	50	7½	12½	3⅝	SE50B3-8F	SE50B3-8S	4	56
10	50	7½	15½	3⅝	SE50B3-10F	SE50B3-10S	4	60

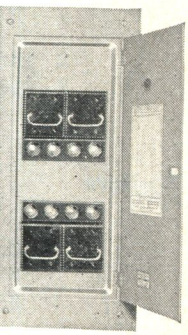
SEQUENCE: METER — SWITCH — FUSE
PULFUZSW TYPE

BASES—Made of sections of moulded material assembled on a mounting back.
MAINS—Pulfuzswitch units, 60 Amp. D. P. 120/240 volt, with bonded solid neutral. Series and parallel connection for main feeder.
BRANCHES—Single Pole plug fuse connections for 15 (or 20) Amp. 120 volt 2 wire solid neutral branches.
BOX—Code thickness galvanized steel.
FRONT—Code thickness furniture steel, rust-proof and Pearl Gray Finish. Flush or Surface Mounting. Ring catch on door.



SEPF63-4F

Service Switch Capacity	No. of Brns. 15 A.	Inside Dimensions of Box Wide	High	Deep	Catalog Number Flush Mounting	Surface Mounting	Std. Pkg. Quantity	Approx. Wt. Std. Pkg.
3 Wire Main Connection 30 and 60 Amp. Main Pulfuzsw with Plug Fuse Branches								
	4	7½	14	3⅝	SEPF63-4F	SEPF63-4S	4	65
	6	7½	17	3⅝	SEPF63-6F	SEPF63-6S	4	70
60A	8	7½	17	3⅝	SEPF63-8F	SEPF63-8S	3	75
	10	7½	20	3⅝	SEPF63-10F	SEPF63-10S	4	80
	12	7½	20	3⅝	SEPF63-12F	SEPF63-12S	2	50



SEMRT8-PL100

Twin MR Multiple Pullout Unit—All PFS pullout switches wired in parallel. Main controls lights only. Branches: 1-60A Pullout, 2-30A Pullouts.

Amp. Main Feeder Conn.	No. of Brns. 15 A.	60 A.	Inside Dimensions of Box Wide	High	Deep	Catalog Number Flush Mounting	Catalog Number Surface Mounting	Std. Pkg.	Wt. Std. Pkg.
100A Parallel	8	1	9	24	3⅝	SEMRT8-PL100F	SEMRT8-PL100S	1	20
	12	1	9	26	3⅝	SEMRT12-PL100F	SEMRT12-PL100S	1	22

ENCLOSED CUTOUTS and PANELBOARDS

ONE FUSE — SOLID NEUTRAL SAFETY TYPE

FOR RESIDENCES AND SMALL INSTALLATIONS

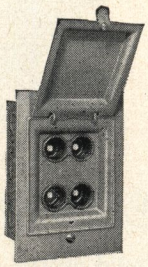
BASES—Made of sections of moulded material.

MAIN CONNECTIONS—Lugs only: 2 wire 120 volt and 3 wire 120/240 volt, with insulated solid neutral connection.

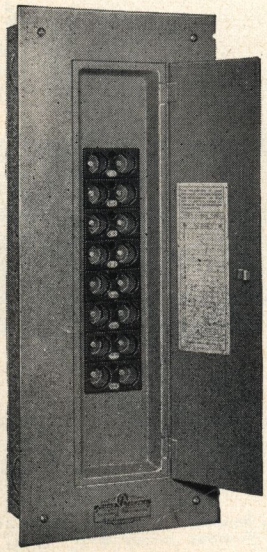
BRANCHES—Single Pole plug fuse branches for 15 Amp. 120 volt, 2 wire solid neutral circuits.

BOX—Code thickness galvanized steel: 2 to 12 branches 1½" gutters; 14 to 20 branches 3" gutters top and bottom, 2½" gutters at side.

FRONT—Code thickness furniture steel, rust-proof, and Pearl Gray Finish. Flush and Surface Mounting. Ring catch on door.



R23-4F



R3-16F

Branches	Amp. Main Bus Bar	Inside Dimensions of Box			Catalog Number		Std. Pkg. Quantity	Approx. Wt. Std. Pkg.
		Wide	High	Deep	Flush Mounting	Surface Mounting		
ENCLOSED CUTOUTS								
2 Wire Main Connection								
2	30	4½	7	3	R2-2F	R2-2S	10	50
2 or 3 Wire Main Connection								
4	30	4½	7	3	R23-4F	R23-4S	10	50
3 Wire Main Connection								
4	30	7½	8	3	R3-4F	R3-4S	10	50
6	50	7½	9½	3	R3-6F	R3-6S	6	48
8	60	7½	14	3	R3-8F	R3-8S	4	44
10	60	7½	15½	3	R3-10F	R3-10S	4	56
12	60	7½	17	3	R3-12F	R3-12S	4	68
PANELBOARDS								
3 Wire Main Connection								
16	100	9	24	3⅝	R3-16F	R3-16S	2	46
20	100	9	28	3⅝	R3-20F	R3-20S	2	58
4 Wire Main Connection								
16	100	9	24	3⅝	R4-16F	R4-16S	2	46
20	100	9	28	3⅝	R4-20F	R4-20S	2	58
NIP PANELBOARDS								
Specifications as above except Box has 3" Gutters and Door has Catch Lock								
4	60	12	13½	4	NIP04F-3L	NIP04S-3L		20
8	60	12	16½	4	NIP08F-3L	NIP08S-3L		25
12	60	12	19½	4	NIP12F-3L	NIP12S-3L		35
16	100	12	25½	4	NIP16F-3L	NIP16S-3L		45
20	100	12	28½	4	NIP20F-3L	NIP20S-3L		50

SERVICE EQUIPMENT

PULFUZSW TYPE

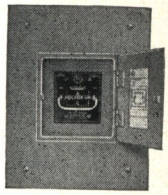
BASES—Made of sections of moulded material assembled directly into the box for Surface mounting; and assembled onto a mounting back for Flush mounting to allow for adjustments.

MAINS—Pulfuzsw units, 30, 60 and 100 Amp. D. P. with bonded solid neutral for single phase 120/240 volt 3 wire service. T. P. with solid neutral for 120/208 4 wire 3 phase service.

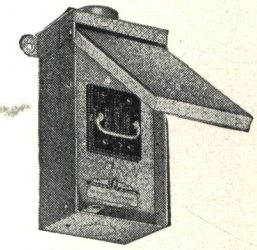
BRANCHES—Single pole plug fuse connections for 15 (or 20) Amp. 120 volt 2 wire solid neutral branches.

BOX—Code thickness galvanized steel.

FRONT—Code thickness furniture steel, rust-proof, and Pearl Gray Finish. Ring catch on door.



SEPF332NF



SEPF632NR

Service Switch Capacity	No. Poles	Dimensions Inside Box Wide	High	Deep	Catalog Number Flush Mounting	Surface Mounting	Std. Pkg. Quantity	Approx. Wt. Std. Pkg.
PULFUZSWITCH UNITS ONLY—With Solid Neutral								
30 Amp.	2	4½	7	3	SEPF332NF	SEPF332NS	6	30
	3	7½	8	3	SEPF333NF	SEPF333NS	6	45
60 Amp.	2	7½	9½	3⅝	SEPF632NF	SEPF632NS	6	35
	3	9	13	3⅝	SEPF633NF	SEPF633NS	4	45
100 Amp.	2	9½	16½	4¾	SEPF1032NF	SEPF1032NS	2	40
	3	12	16½	4¾	SEPF1033NF	SEPF1033NS	2	50
"RAINTITE" UNITS—HUBS INCLUDED								
30 Amp.	2	4½	7	3		SEPF332NR	7	50
	3	4½	7	3		SEPF333NR	7	50
60 Amp.	2	5	10	3½		SEPF632NR	7	56
	3	6½	10	3½		SEPF633NR	7	56
100 Amp.	2	7½	18	4¾		SEPF1032NR	5	60
	3	10	18	4¾		SEPF1033NR	5	60

NEW "M-R" SERVICE EQUIPMENT

SEQUENCE: METER — SWITCH — FUSE

MAIN AND RANGE COMBINATION

BASE—One-piece type; made of moulded material.

MAINS—60 Amp. "Series" type Main Pulfuzsw controls entire unit. 60 and 100 Amp. "Parallel" type Main Pulfuzsw controls lighting branch circuits and sub-feed lugs ONLY; Range circuit connected ahead of Main Switch.

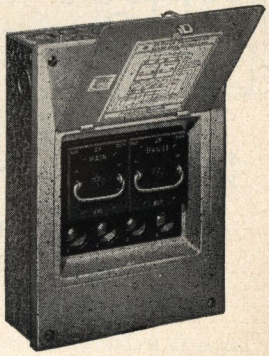
BRANCHES—S. P. plug fuse connections for 15 Amp., 125 volt, 2 wire, solid neutral circuits; 1—60 D. P. Pulfuzswitch with solid neutral for range circuit. Sub-feed lugs can be used for connection to water heater or an additional distribution center, or both, within total main capacity not used.

BOX—Code thickness galvanized steel.

FRONT—Code thickness furniture steel. Rust-proof and Pearl Gray Finish. Flush and Surface Mounting (also Raintite). Door hinged at top and fitted with catch.

No. Brn. 15A.	Box Size Wide	High	Deep	CATALOG NUMBER FLUSH	SURFACE
*100 AMP. "Parallel" Main Connection					
4	9	13	3½	SEMR4-P100F	SEMR4-P100S
6	9	16	3⅝	SEMR6-P100F	SEMR6-P100S
8	9	16	3⅝	SEMR8-P100F	SEMR8-P100S
10	9	20	3⅝	SEMR10-P100F	SEMR10-P100S
12	9	20	3⅝	SEMR12-P100F	SEMR12-P100S
*"RAINTITE" 100 AMP. "Parallel" Main Connection—HUB INCLUDED					
4	9	15	3½		SEMR4-P100R
6	9	18	3½		SEMR6-P100R
8	9	18	3½		SEMR8-P100R
10	9	22	3½		SEMR10-P100R
12	9	22	3½		SEMR12-P100R

*If Series Connection is desired, change "P100" in Cat. No. to "S60". Box Size remains the same.



SEMR4-S60 Surface

SERVICE EQUIPMENT FA SPLIT BUS TYPE

FOR RESIDENTIAL AND FILLING STATION SERVICE

Listed by UND. LAB. INC. for Label Service

This is our New Service Equipment with split-bus bars which provide a Service section and a Lighting section.

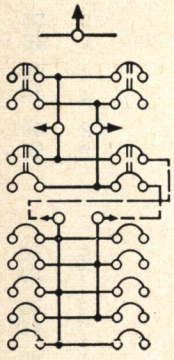
Service section has space for four or six double pole breakers, which can be used as service branches for water heaters, ranges, clothes dryers, air conditioning, etc. One double pole space must be used for 50 Ampere Main Disconnect for 10 single pole lighting branches.

Sequence bussing permits any two adjoining single pole branches to be made double pole by use of handle extensions.

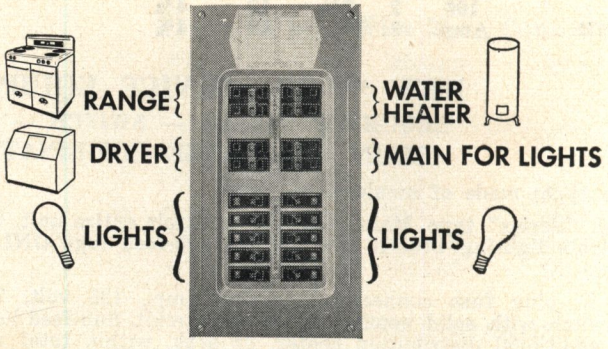
120/240 Volt S/N 3-Wire

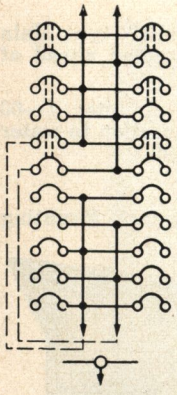
2 Pole Spaces in Service Section	1 Pole Spaces in Lighting Section	Amp. Mains Bus	Box Size W	Box Size H	Box Size D	Catalog No. Add "F" for Flush or "S" for Surface	Std. Pkg.	Wt. Std. Pkg.
4	10	100	9	18	3⅝	SE4DPL100-10SPL50	4	56
4	10	100	9	24	3⅝	SE6DPL100-10SPL50	3	60
6	10	200	14	25	4 5/16	SE6DPL200-10SPL50	3	60

Provides separate service section for Range—Water Heater—Dryer—Air Conditioning plus a Main for the Separate Lighting Section.



SE4DPL100



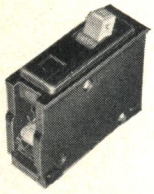


SE6DPL100
SE6DPL200

FA SINGLE POLE QP CIRCUIT BREAKERS

Order separate to complete above assemblies

Cat. No. and Amp.		Std. Pkg.	Wt. Std. Pkg.
QP10	QP30	20	6½ lbs.
QP15	QP40		
QP20	QP50		



Handle Locking Device and Handle Extensions available at small extra charge.

Two Pole Common Trip "QP" available for above assemblies

LOAD CENTERS FA LIGHTING - LCQP TYPE

ENCLOSED PANEL BASE ASSEMBLY

Listed by Und. Lab. Inc. for Label Service

Suitable for use on U.S. Government Specification WP-131a, Amendment No. 2

These Load Centers with six or less branches, either single or double pole, are suitable for use as Service Equipment, without a main circuit breaker. Enclosed Panel Base Assembly — includes box, panel base and front cover shipped in one carton. Breakers must be ordered and priced separately.

Sequence bussing permits any adjoining pair of single pole breakers to be made double pole (individual trip) by use of handle extensions. Two pole common trip breakers are also available.

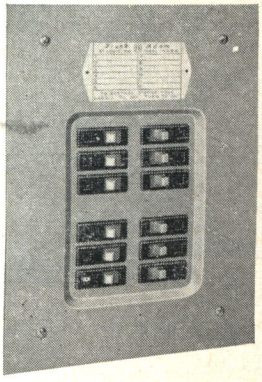
BOX—FA Standardized one piece galvanized steel.

COVER—Furnished with K. O.'s for maximum branches for each enclosure and a circuit directory card. Specify flush or surface mounting.

MOUNTING BACK—Steel mounting back is adjustable type with groundable solid neutral.

FINISH— FA Pearl Gray.

RAINTIGHT HUBS—Furnished with Raintight units and are included in list price. FA Standard is as follows—4 Cir.—1" Hub; 8, 12, 20 Circuit—1¼" Hub.



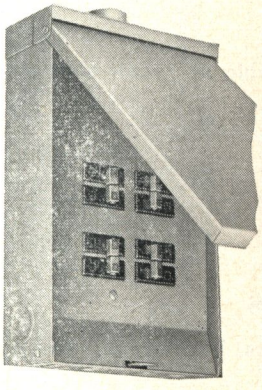
INDOOR TYPE

120/240 VOLT S/N 3-WIRE MAIN LUGS

No. of Single Pole Spaces	Amp. Mains	Box Size Wide	Box Size High	Box Size Deep	Catalog No. Add "F" for Flush "S" for Surface	Std. Pkg.	Wt. Std. Pkg.
4	70	7½	9½	3	LCQP04-3L07	12	72
8	100	9	11	3	LCQP08-3L10	6	60
12	100	9	13	3⅝	LCQP12-3L10	5	60
20	100	9	18	3⅝	LCQP20-3L10	5	80

120/208 VOLT S/N 4-WIRE MAIN LUGS

12	100	9	16	3⅝	LCQP12-4L10	5	70
20	100	9	20	3⅝	LCQP20-4L10	4	76



RAINTIGHT ENCLOSURES — HUBS INCLUDED

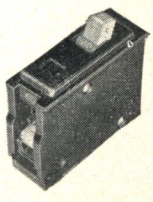
120/240 VOLT S/N 3-WIRE MAIN LUGS

4	70	7½	12	3½	LCQP04-3L07	1	11
8	100	9	15	3½	LCQP08-3L10	1	15
12	100	9	15	3½	LCQP12-3L10	1	17
20	100	9	20	3½	LCQP20-3L10	1	20

120/208 VOLT S/N 4-WIRE MAIN LUGS

12	100	9	18	3½	LCQP12-4L10R	1	19
20	100	9	22	3½	LCQP20-4L10R	1	22

FA SINGLE POLE QP CIRCUIT BREAKERS



Order separate to complete above assemblies—Order as Std. Pkg.

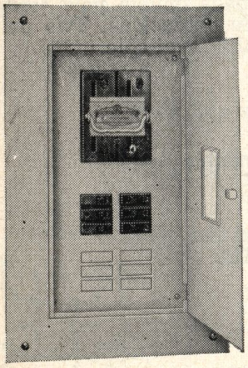
Cat. No. & Amp.		Std. Pkg.	Wgt. Std. Pkg.
QP10	QP30	20	6½ lbs.
QP15	QP40		
QP20	QP50		

Handle Lock (QPLD) and Handle Extension (QPEX) available at small extra charge. Two Pole Common Trip QP, available for above assemblies.

LOAD CENTERS FA LIGHTING

LCQP TYPE—INDOOR

Listed by UND. LAB. INC. for Label Service



LCQP12-3PF10

LOAD CENTER WITH 100 AMP. MAIN PULFUZ

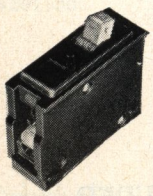
50% OF BREAKERS INCLUDED

12 or 20 Circuit Breaker Branches
Ample Wiring Gutters
Sequence Bussing
Ample and Convenient Knockouts
Meets requirements where 100 Ampere Main is specified

Max. No. Branches	No. of Branch Breakers Included	Box Size Wide	Box Size High	Box Size Deep	Catalog No. Add "F" for Flush "S" for Surface	Shpg. Wt.
12	6	14	24	4 5/16	LCQP12-3PF10	30
20	10	14	29	4 5/16	LCQP20-3PF10	50

FA SINGLE POLE QP CIRCUIT BREAKER

Order separate to complete above assemblies



QP Breaker

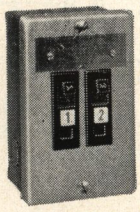
Cat. No. and Amp.		Std. Pkg.	Wt. Std. Pkg.
QP10	QP30	20	6½ lbs.
QP15	QP40		
QP20	QP50		

Handle Lock (QPLD) and Handle Extension (QPEX) available at small additional charge.

Two Pole Common Trip QP available for above assemblies.

ENCLOSED CIRCUIT BREAKERS

Complete Device with 1 or 2 Screw Type QS Circuit Breakers. No Neutral Flush or Surface Mounting—Ideal for Separate Water Heater Control.



ECB-215

No. of Breakers	Ampere Capacity	Box Size Wide	Box Size High	Box Size Deep	Catalog No. Add "F" for Flush "S" for Surface	Std. Pkg.	Wt. Std. Pkg.
1	15	3	5	2½	ECB-115	8	16
1	20				ECB-120	8	16
2	15				ECB-215	8	16
2	20				ECB-220	8	32

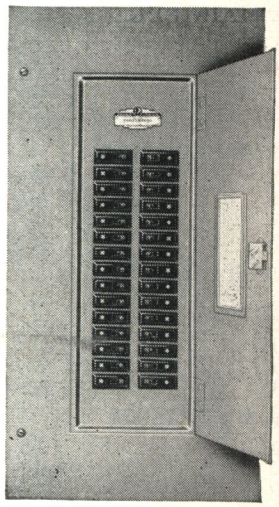
PANELBOARDS FA LIGHTING

QP-3 PANELBOARDS & CABINETS. For 120/240 Volt, 3 wire service.

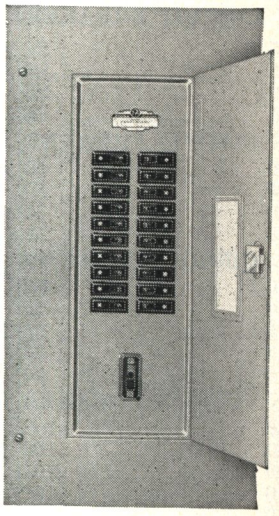
LIST PRICES—Factory assembled complete with Quicklag-P breakers

Listed by Und. Lab., Inc., for Label Service

These panelboards are usable on U. S. Gov. Specification No. WP-131a—Amendment No. 2.



No. of Brh.	Box Size Wide	High	Deep.	Catalog Number	Shpg. Weight
	MAIN LUGS AT BOTTOM, SOLID NEUTRAL AT TOP				
	SPACE FOR 12 S.P. BREAKERS—100 AMP. MAIN LUGS				
6				QP06-3L10	23
8	14″	18″	4¾″	QP08-3L10	23
10				QP10-3L10	24
12				QP12-3L10	24
	SPACE FOR 20 S.P. BREAKERS—100 AMP. MAIN LUGS				
14				QP14-3L10	39
16	14″	22″	4¾″	QP16-3L10	39
18				QP18-3L10	40
20				QP20-3L10	40
	SPACE FOR 30 S.P. BREAKERS—200 AMP. MAIN LUGS				
22				QP22-3L20	54
24				QP24-3L20	55
26	14″	31″	4¾″	QP26-3L20	55
28				QP28-3L20	56
30				QP30-3L20	56
	SPACE FOR 42 S.P. BREAKERS—200 AMP. MAIN LUGS				
32				QP32-3L20	72
34				QP34-3L20	73
36	19″	39½″	4¾″	QP36-3L20	73
38				QP38-3L20	74
40				QP40-3L20	74
42				QP42-3L20	74



	WITH MAIN CIRCUIT BREAKER AT BOTTOM, SOLID NEUTRAL AT TOP				
	SPACE FOR 12 S.P. BREAKERS—50 AMPERE MAIN CIRCUIT BREAKER				
6				QP06-3B05	35
8	14″	25″	4¾″	QP08-3B05	36
10				QP10-3B05	36
	WITH 100 AMPERE MAIN CIRCUIT BREAKER				
12	14″	25″	4¾″	QP12-3B10	37
	SPACE FOR 20 S.P. BREAKERS—100 AMPERE MAIN CIRCUIT BREAKER				
14				QP14-3B10	50
16	14″	29″	4¾″	QP16-3B10	50
18				QP18-3B10	51
20				QP20-3B10	51
	SPACE FOR 30 S.P. BREAKERS—200 AMPERE MAIN CIRCUIT BREAKER				
22				QP22-3B20	97
24				QP24-3B20	98
26	19″	45½″	6½″	QP26-3B20	98
28				QP28-3B20	99
30				QP30-3B20	99
	SPACE FOR 42 S.P. BREAKERS—200 AMPERE MAIN CIRCUIT BREAKER				
32				QP32-3B20	100
34				QP34-3B20	100
36	19″	51½″	6½″	QP36-3B20	101
38				QP38-3B20	101
40				QP40-3B20	102
42				QP42-3B20	102

Listed Standard Panelboard furnished with 15 A. branches; 10, 20, 30, 40 and 50 Amp. Breakers can be furnished at no extra charge except when increased capacity of main bus bars is required.

Common Trip QP—available for above assemblies.

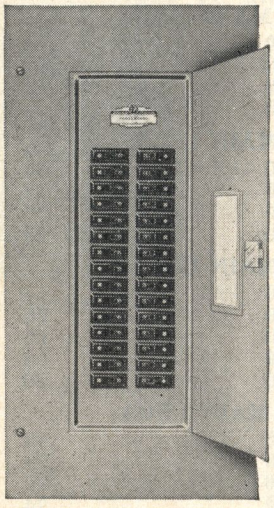
PANELBOARDS FA LIGHTING

QP-4 PANELBOARDS & CABINETS—For 120/208 Volt, 4 wire service.

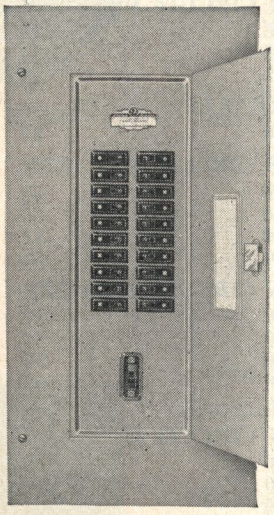
LIST PRICES—Factory assembled complete with breakers.

Listed by Und. Lab., Inc., for Label Service

These panelboards are usable on U. S. Gov. Specification WP-131a—Amendment No. 2.



No. of Brh.	Box Size Wide	Box Size High	Box Size Deep.	Catalog Number	Shpg. Weight
MAIN LUGS AT BOTTOM, SOLID NEUTRAL AT TOP					
SPACE FOR 12 S.P. BREAKERS—100 AMPERE MAIN LUGS					
6				QP06-4L10	23
8	14″	18″	4¾″	QP08-4L10	23
10				QP10-4L10	24
12				QP12-4L10	24
SPACE FOR 20 S.P. BREAKERS—100 AMPERE MAIN LUGS					
14				QP14-4L10	39
16	14″	22″	4¾″	QP16-4L10	40
18				QP18-4L10	40
20				QP20-4L10	42
SPACE FOR 30 S.P. BREAKERS—100 AMPERE MAIN LUGS					
22				QP22-4L10	54
24				QP24-4L10	55
26	14″	29″	4¾″	QP26-4L10	55
28				QP28-4L10	56
30				QP30-4L10	56
SPACE FOR 42 S.P. BREAKERS—200 AMPERE MAIN LUGS					
32				QP32-4L20	72
34				QP34-4L20	72
36	19″	39½″	4¾″	QP36-4L20	73
38				QP38-4L20	73
40				QP40-4L20	74
42				QP42-4L20	74



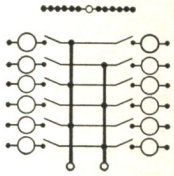
MAIN CIRCUIT BREAKER AT BOTTOM, SOLID NEUTRAL AT TOP					
SPACE FOR 12 S.P. BREAKERS—50 AMPERE MAIN CIRCUIT BREAKER					
6				QP06-4B05	24
8	14″	25″	4¾″	QP08-4B05	25
10				QP10-4B05	25
12				QP12-4B05	26
SPACE FOR 20 S.P. BREAKERS—100 AMPERE MAIN CIRCUIT BREAKER					
14				QP14-4B10	50
16	14″	29″	4¾″	QP16-4B10	50
18				QP18-4B10	51
20				QP20-4B10	51
SPACE FOR 30 S.P. BREAKERS—100 AMPERE MAIN CIRCUIT BREAKER					
22				QP22-4B10	52
24				QP24-4B10	52
26	14″	37″	4¾″	QP26-4B10	53
28				QP28-4B10	53
30				QP30-4B10	54
SPACE FOR 42 S.P. BREAKERS—200 AMPERE MAIN CIRCUIT BREAKER					
32				QP32-4B20	100
34				QP34-4B20	100
36	19″	51½″	6½″	QP36-4B20	101
38				QP38-4B20	101
40				QP40-4B20	102
42				QP42-4B20	102

Listed Standard Panelboard furnished with 15 A. branches; 10, 20, 30, 40 and 50 Amp. Breakers can be furnished at no extra charge except when increased capacity of main bus bars is required.

Common Trip QP—available for above assemblies.

FRANK ADAM PANELBOARDS

Safety Type LNTP-3 Panelboards and Cabinets



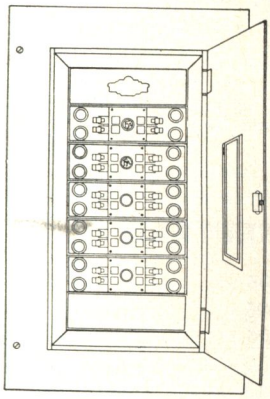
PANELBOARD—Made of sections of brown Bakelite.

MAINS— 3 Wire, 120-240 Volts—Lugs at Bottom
Solid Neutral at Top.
Main Switch at Top.

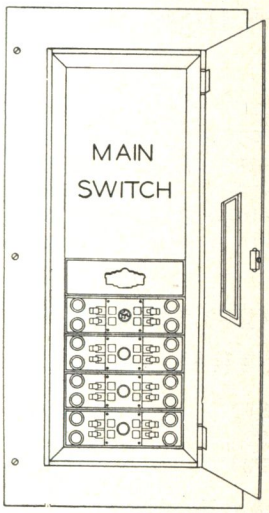
BRANCHES— 30 Amp., S. P. (FA) Tumbler Switches with N. E. C. Plug Type Fuse Connections for 15 Amp., 120 Volt, 2 Wire, Solid Neutral Circuits.

BOX— Code Thickness Galvanized Steel. 4" Gutters.

FRONT— Code Thickness Furniture Steel. Rust-proof and Pearl Grey Finish. Flush Mounting unless Surface is ordered.



Branches	Ampere Main Bus Bar	Inside Dimensions and Marking of Box Wide	High	Deep	Combination of Panelboard, Box and Front Catalog Number	Approx. Weight
MAIN CABLE LUGS ONLY, SOLID NEUTRAL						
8	60	19	15½	4¾	(FA)LNTP08-3L06	44
12	60	19	18½	4¾	(FA)LNTP12-3L06	51
16	100	19	27½	4¾	(FA)LNTP16-3L10	65
20	100	19	30½	4¾	(FA)LNTP20-3L10	72
24	200	19	33½	4¾	(FA)LNTP24-3L20	79
28	200	19	39½	4¾	(FA)LNTP28-3L20	94
32	200	19	42½	4¾	(FA)LNTP32-3L20	100
36	200	19	45½	4¾	(FA)LNTP36-3L20	170
40	200	19	48½	4¾	(FA)LNTP40-3L20	180

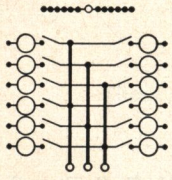


(FA) PULFUZSWITCH SAFETY TYPE MAIN DISCONNECT, SOLID NEUTRAL						
8	60	19	21½	4¾	(FA)LNTP08-3PF06	80
12	60	19	24½	4¾	(FA)LNTP12-3PF06	90
16	100	19	30½	4¾	(FA)LNTP16-3PF10	115
20	100	19	33½	4¾	(FA)LNTP20-3PF10	125
(FA) KLAMPSWFUZ SAFETY TYPE HINGED PULL-OUT MAIN DISCONNECT, SOLID NEUTRAL						
24	200	19	48½	6½	(FA)LNTP24-3KSF20	245
28	200	19	54½	6½	(FA)LNTP28-3KSF20	255
32	200	19	57½	6½	(FA)LNTP32-3KSF20	270
36	200	19	60½	6½	(FA)LNTP36-3KSF20	283
40	200	19	63½	6½	(FA)LNTP40-3KSF20	297

NOTE—For Door-in-Door Front, ADD letter "D" to Catalog Number.

FRANK ADAM PANELBOARDS

Safety Type LNTP-4 Panelboards and Cabinets



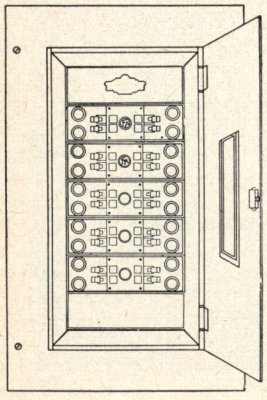
PANELBOARD—Made of sections of brown Bakelite.

MAINS— 4 Wire, 3 Phase; 120-208 Volt—Lugs at Bottom.
Solid Neutral at Top.
Main Switch at Top.

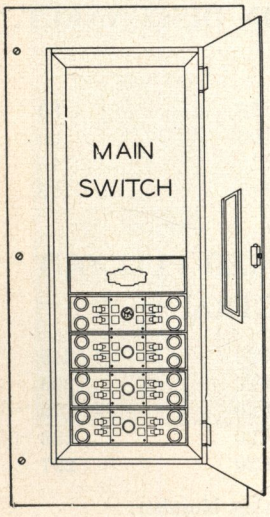
BRANCHES— 30 Amp., S. P. (FA) Tumbler Switches with N. E. C. Plug Type Fuse Connections for 15 Amp, 120 Volt, 2 Wire, Solid Neutral Circuits.

BOX— Code Thickness Galvanized Steel. 4" Gutters.

FRONT— Code Thickness Furniture Steel. Rust-proof and Pearl Grey Finish. Flush Mounting unless Surface is ordered.



Branches	Ampere Main Bus Bar	Inside Dimensions and Marking of Box Wide	High	Deep	Combination of Panelboard, Box and Front Catalog Number	Approx. Weight
MAIN CABLE LUGS ONLY, SOLID NEUTRAL						
8	60	19	15½	4¾	(FA)LNTP08-4L06	50
12	60	19	18½	4¾	(FA)LNTP12-4L06	57
16	60	19	21½	4¾	(FA)LNTP16-4L06	65
20	100	19	30½	4¾	(FA)LNTP20-4L10	74
24	100	19	33½	4¾	(FA)LNTP24-4L10	79
28	100	19	39½	4¾	(FA)LNTP28-4L10	94
32	200	19	45½	6½	(FA)LNTP32-4L20	100
36	200	19	48½	6½	(FA)LNTP36-4L20	170
40	200	19	51½	6½	(FA)LNTP40-4L20	180

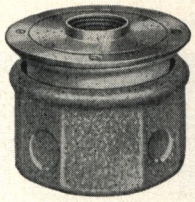


(FA) PULFUZSWITCH SAFETY TYPE MAIN DISCONNECT, SOLID NEUTRAL						
8	60	19	21½	4¾	(FA)LNTP08-4PF06	80
12	60	19	24½	4¾	(FA)LNTP12-4PF06	90
16	60	19	27½	4¾	(FA)LNTP16-4PF06	100
20	100	19	39½	4¾	(FA)LNTP20-4PF10	125
24	100	19	42½	4¾	(FA)LNTP24-4PF10	145
28	100	19	45½	4¾	(FA)LNTP28-4PF10	160
(FA) KLAMPSWFUZ SAFETY TYPE HINGED PULL-OUT MAIN DISCONNECT, SOLID NEUTRAL						
32	200	19	57½	6½	(FA)LNTP32-4KSF20	270
36	200	19	60½	6½	(FA)LNTP36-4KSF20	283
40	200	19	63½	6½	(FA)LNTP40-4KSF20	297

NOTE—For Door-in-Door Front, Add letter "D" to Catalog Number.

FA FLOOR BOXES

Types FB-3 & FB-5



Type FB-5

These Floor Boxes are of the adjustable type, satin finish brass reversible cover. They are for installation in concrete or tile floors.

Type FB-3 is for telephone, signal and bell system outlets; also light and small capacity power outlets without receptacle. The 3″ cover has ½, 1½-inch pipe size tapped opening with brass plug.

Type FB-5 is for small capacity light or power service. Use any receptacles with mounting holes on 1¾″ or 2⅜″ centers. Also telephone, signal and bell systems.

Each unit is furnished with a hot galvanized finish No. 12 gauge, 4¼-inch diameter, 3 inch deep, pressed steel box having two ½-inch and two ¾-inch conduit knockouts in opposite sides and one ½-inch knockout in bottom. 1-inch conduit can be used by reaming these knockouts.

A cadmium plated drawn steel adjusting ring permits adjustment for ¾-inch variation in setting of box. Extra depth rings for greater variation are available at an additional charge. Rubber gaskets make the box reasonably watertight.

Cat. No.	Std. Pkg.	Ship. Weight
FB-3	24	85 lb.
FB-5	24	100 lb.

ELECTRIC BUILT-IN-TYPE FA QUIKHETER

Particularly designed as an auxiliary circulating heater. Takes cool air from floor, moving it up through heating chamber and warms the entire room. It is a radiant glow heater and can be built into wall or partition of old or new house.

Watts	Volts	Box Size W	Box Size H	Box Size D	Catalog Number	Approx. Weight
1000	110 to	9″	21″	3½″	**921-10**	14
1500	120	9″	21″	3½″	**921-15**	14
2000	120/240	19″	21″	3½″	**1921-20**	29
3000		19″	21″	3½″	**1921-30**	29

FA HANGER OUTLETS

The Hanger Outlet is the original combination of support and electrical connection, in one unit, for hanger outlet service.

SECURITY TYPE

The Security Type is furnished complete. It consists of 4-inch square by 1½-inch deep outlet box made of No. 14 gauge galvanized steel, and a ½-inch deep raised box cover. This cover has special plaster keys to securely hold the plaster and prevent it from cracking around the outlet.

The box provides ample wiring space to serve as a junction box when two or more outlets are connected to the same circuit. Knockouts are provided for ½-inch and ¾-inch conduit.

A heavy stamped steel hanger bracket is adjustably fastened to the back of the box. A heavy brass adjusting tube threaded into the mounting bracket allows for variation in thickness of plaster.

The fan or other appliance is hung upon a ¼-inch steel hanger bolt threaded into the brass tube and finished with a washer and screw driver type cap-nut.

The 2½x4¼-inch face plate is made of .060 brass with brushed finish.

The "T" slot type, brown Bakelite receptacle is riveted to a steel sub-plate.

Std. Pkg. 20, Approx. wt. 40 lbs.

FIXTURE STUD TYPE

Similar to Security type, but box, cover and stud must be furnished by contractor.

Any 4-inch square by 1½-inch deep standardized outlet box with ⅜-inch fixture stud, and ½-inch deep single gang cover can be used. The ordinary type of switch box cannot be used. The adjustable hanger bracket has a cleared hole to fit the fixture stud. Two ⅜-inch lock nuts are included for fastening.

Std. Pkg. 20. Approx. wt. 12 lbs.

TYPE FHSB

The Type FHSB hanger outlet is also furnished without box or cover. The same type box and cover specified above must be supplied by the customer.

The formed steel supporting frame is fastened to the box cover, and the fan or other appliance is attached to it. The receptacle is fastened directly to the brass face plate.

This type carries the weight of the appliance from the box cover, not from the back of box.

Std. Pkg. 20. Approx. wt. 12 lbs.

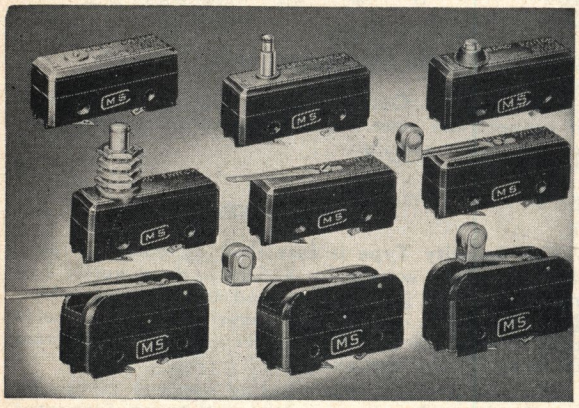
MICRO SWITCH

DIVISION OF MINNEAPOLIS-HONEYWELL REGULATOR COMPANY

MICRO Precision Switches with Capacities up to 2 HP at 230 Volts AC

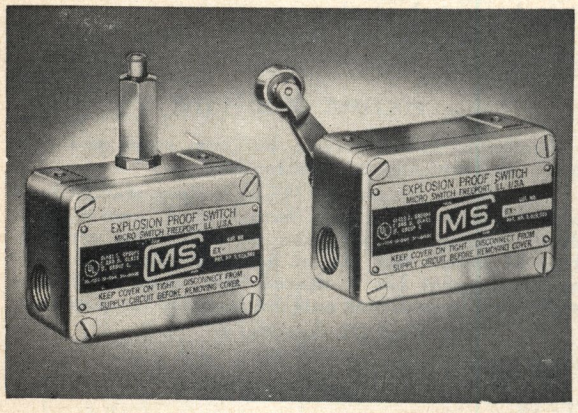
MICRO SWITCH offers a complete line of small-size, snap-action precision switches with capacities up to 2 HP at 230 volts a-c; available with a wide variety of housings, shapes, sizes and actuators, a few of which are shown.

MICRO General Purpose Basic Switches



Nine popular designs of basic switches differ in respect to actuators, operating means and characteristics. All are Underwriters' Laboratories listed at 15 amperes 125, 250, 460 volts a-c. The basic switch is the switching element for the entire line of Micro Switch products. The pin plunger design (upper left) measures only $\frac{11}{16}$" x $\frac{27}{32}$" x $1\frac{15}{16}$" and weighs less than one ounce.

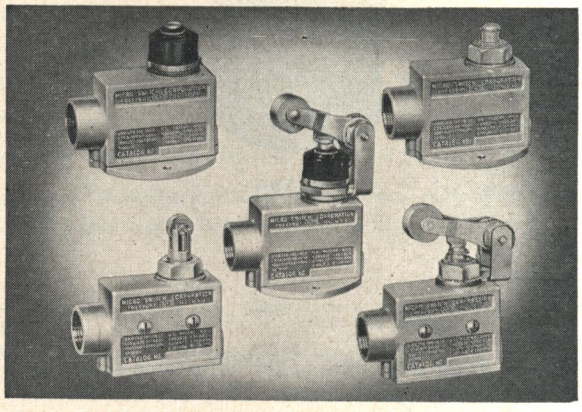
MICRO Explosion-Proof Switches



Enclosed in heavy cast metal housings, these are the smallest switches listed by Underwriters' Laboratories for use in explosive atmospheres Class I, Groups C and D and Class II, Groups E, F and G. Housing measures 1-31/32" x 2-35/64" x $3\frac{23}{32}$" with weight of 2½ lbs. Similar switches are available in splash-proof housings for use in locations where the splash of oil, water, or coolant affects less adequately housed switches.

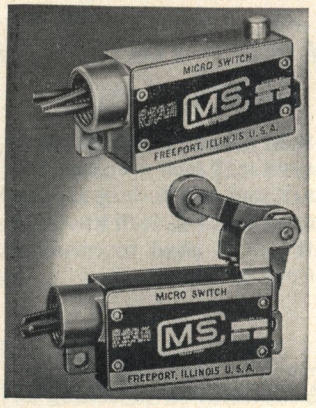
MICRO precision switches are designed for use in alternating current circuits in industrial, commercial, and domestic applications. They are single-pole switches, available as double-throw, normally-open or normally-closed.

MICRO Die Cast Enclosed Switches



Die cast enclosed switches—with basic switches as the switching element—are available in a variety of actuator designs with a choice of bottom or side mounting. Metal housings measure 1" x 2-19/32" x 3-1/64" and provide protection, conduit attachment and means of actuation. Synthetic rubber-sealed plunger and gasketed bottom plates are designed for applications where oil, water, dust or abrasives are present. Weight ½ lb.

MICRO Limit Switches



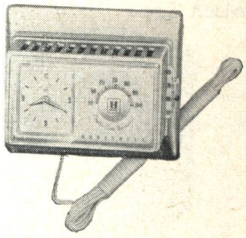
MICRO Type "LN" for general industrial use. Resistant to dust, dirt, abrasives or splash of oil and water. Available in right or left hand designs. Housing measures 1" x $2\frac{21}{32}$" x $4\frac{1}{16}$".



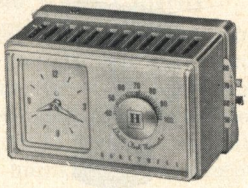
MICRO-LIMIT precision limit switch — ruggedly constructed for heavy duty, adjustable for wide variety of uses. Sealed for complete protection for switching element. Housing measures: $5\frac{13}{16}$" x2¼" x $1\frac{13}{16}$".

MINNEAPOLIS-HONEYWELL ROOM THERMOSTATS

CHRONOTHERM



T849A

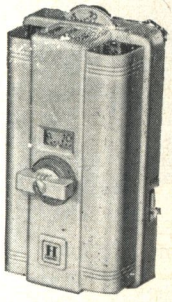


T852A

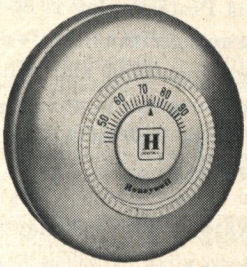
The Chronotherms are the latest in automatic thermostats. Day and night control points and clock settings can be made externally with internal temperature-lock settings. The T849A Plug-in Chronotherm is specifically designed for convenient replacement having "plug-in" transformers. The T852A and T849A Chronotherms have a universal heater element and snap-action switching contacts for 2 or 3 wire applications. The T252A is for 3 wire application.

Type No.	Description	List Price
T252A	Chronotherm-50-80°F, 115/60	$42.25
T852A	Chronotherm-50-80°F, 115/60	42.25
T849A	Plug-in Chronotherm 115/60	42.25

THE ACRATHERM



TM801



T86A
T26A

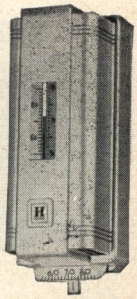
A bimetal actuated low voltage open contact thermostat for controlling relays, Protectorelays, gas valves, motors, etc. Temperature setting by external dial at top for TM801 and by dial on face of T26A and T86A. Silver bronze finish. The Time-O-Stat incorporates all the features of the standard Thermostat plus an extra night dial, a simple external knob for manual shutdown to any desired night setting, and automatic morning pickup to day temperature level.

T86A	Thermostat-55-85°F	$13.70
T26A	Thermostat-55-85°F	16.00
TM801	Time-O-Stat—Day, 60-84, Nite, 55-70°F	28.90

EXTRA CHARGES — ROOM THERMOSTATS

Cataloged Special Ranges (F.° or C.°)	Add $ 5.90
Other than Standard Sprayed Finish	Add 5.90
Finish to Match Sample — Write for Quotation	
For 115 or 230/25, 115 or 230/50 or 230/60 on Chronotherms	Add 2.70
33410A Wall Plates for Conduit Box Mounting TA42	.86

LIGHT DUTY LINE VOLTAGE THERMOSTAT

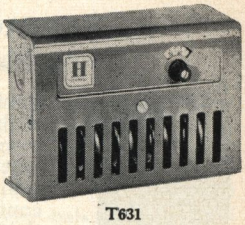


T44A

Magnetic snap-acting, bi-metal actuated room thermostats, suitable for either line or low voltage applications. Type T44A available for heating and T44B for cooling systems. May be used for direct control of small motors, unit heaters, coal blowers, etc. Temperature setting by external lever at bottom.

Type No.	Description	List Price
T44A	Open Contact Thermostat—54-86°F	$14.65
T44B	Open Contact Thermostat—64-96°F	14.65

FARM-O-STAT*



T631

The T631A Farm-O-Stat is a ruggedly constructed line voltage thermostat with S.P.D.T switching, specifically designed for high humidity applications. The ½ H.P. MICRO SWITCH switch is totally enclosed. The bright red cover has slots in front and bottom to allow maximum circulation of air over the protected element. Three mounting holes in base provide easy means of surface mounting. Also has an easy to read dial and external adjustment knob.

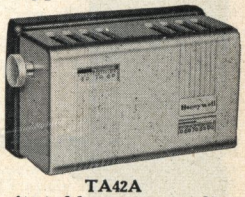
	Rating in Amperes (Full Load) 24 Volts A.C.	115 Volts A.C.	230 Volts A.C.
T631A	2.0	7.4	3.7

T631A—Farm-O-Stat—35° to 100° F $19.25

* Trademark.

HEAVY DUTY LINE VOLTAGE THERMOSTAT

Open Contact Type

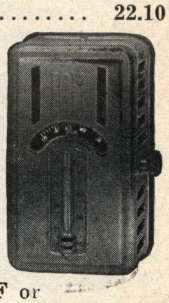


TA42A

These thermostats are available for heating and/or cooling applications. Designed for use where accurate and dependable control of line voltage devices is involved, they are capable of handling directly large motor driven units, blowers, cooling equipment, industrial and commercial stoker fired heating plants, and the like.

TA42A	Thermostat (Direct)—42-75°F or 56-84°F	$20.30
TA42B	Thermostat (Reverse or SPDT) 66-95°F	20.30
TA42J	Same as TA42A except with Positive "On" and Positive "Off"	22.10

Mercury Switch Type



Heavy duty line or low voltage thermostats for control of heating or cooling systems. Capable of handling directly large motor driven unit heaters, coal blowers, cooling equipment, etc.

T42A	Thermostat (Direct)—40-80°F or 60-100°F	$20.30
T42B	Thermostat (Reverse)—40-80°F or 60-100°F	20.30

MINNEAPOLIS-HONEYWELL AUTOMATIC HEATING CONTROLS

UNIT HEATER CONTROLLERS

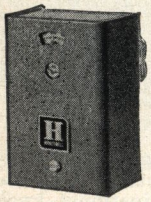


These controls are used to prevent the unit heater fan motor from operating unless the temperature of the unit heater is sufficient to guarantee against circulation of cold air.

Type No.	Description	List Price
LA409B	Surface Aquastat—100-200°F	$12.00
P404B	Pressuretrol, 0-10 lbs.	14.00
L408B	Vaporstat, 0-16 ozs. or 0-4 lbs.	27.30

SURFACE AQUASTAT

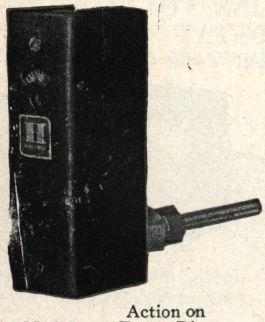
Mercury Switch Type



Surface mounting limit controls with bi-metal sensing element and mercury switching means. No insertion element. Primary application is that of safety or high limit control (in conjunction with a room thermostat) on all types of hot water heating systems. (B model makes on rise in temperature.)

LA209A	Surface Aquastat—100-200°F	$13.50
LA409A	Surface Aquastat—100-200°F	12.00
LA409B	Surface Aquastat—100-200°F	12.00

IMMERSION AQUASTAT*



Fast acting Aquastats for low or high limit (L4006A) and circulator control (L4006B). The liquid filled element detects the boiler water temperature changes quickly making the L4006 particularly adaptable for the small modern boiler. Each L4006 is equipped with an enclosed snap switch.

Model	Action on Temp. Rise	Range	Weight	Units Per Carton	
L4006A	opens	100 to 240F	1.5 lb.	20	$13.60
L4006B	closes				
L6006A	S.P.D.T.	100 to 240F	1.5 lb.	20	15.60

* Trademark.

VAPORSTAT

Mercury Switch Type



Pressure controllers with large bellows designed for vapor pressure applications. Used primarily as a high limit device on vapor heating systems, but are also applicable to liquids, air or non-combustible gases not chemically injurious. (B models make on rise in pressure.)

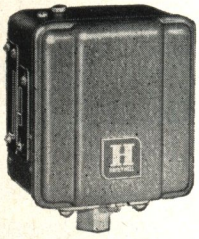
L408A	Vaporstat, 0-16 ozs. or 0-4 lbs.	$27.30
L408B	Vaporstat, 0-16 ozs. or 0-4 lbs.	27.30
L608A	Vaporstat, 0-16 ozs. or 0-4 lbs.	28.50

PRESSURETROL

Mercury Switch Type



"L" Model



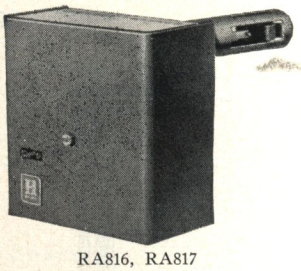
"P" Model

The Pressuretrol is used primarily as a high limit control on steam heating systems, but may also be used with air, liquid or non-combustible gases that are not chemically injurious. Device is bellows actuated mercury switch type.

Type No.	Description	List Price
P204A	Pressuretrol, 0-10 lbs.	$14.00
P404A	Pressuretrol, 0-10 lbs.	14.00
P404B	Pressuretrol, 0-10 lbs.	14.00
L404A	Pressuretrol, 0-15, 2-50, 5-150 lbs.	22.50
L404A	Pressuretrol, 10-300 lbs.	30.30
L404B	Pressuretrol, 0-15, 2-50, 5-150 lbs.	22.50
L404B	Pressuretrol, 10-300 lbs.	30.30
L604A	Pressuretrol, 0-15, 2-50, 5-150 lbs.	23.70
L604A	Pressuretrol, 10-300 lbs.	31.50

PROTECTORELAYS

This Protectorelay is designed primarily for stack mounting and will operate quickly and reliably in low stack temperatures.

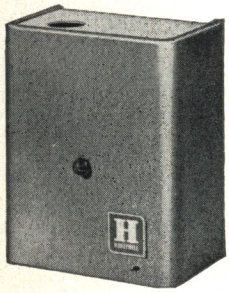


RA816, RA817

RA816A	Protectorelay-Constant Ignition, 115/60	$40.00
RA817A	Protectorelay-Intermittent Ignition, 115/60	44.40

UNIVERSAL RELAYS

The R182A, R182B and R182C Relays are designed for the control of line voltage loads with any Series 10, 20 or 80 devices. The R482 models are used for line voltage thermostats or controllers. The R882 models are for line voltage loads from low voltage two-wire controllers. R882 standard in low voltage 50 or 60 cycle, R182 (equipped with built-in transformer) and R482 standard in 115 volts, 50 or 60 cycle.

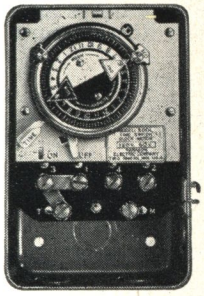


All Relays Listed

R482A	Series 40 Relay—S.P.S.T. 115/60	$15.00
R482B	Series 40 Relay—S.P.D.T. 115/60	16.50
R482C	Series 40 Relay—D.P.D.T. 115/60	17.00
R182A	Universal-Load Circuit, S.P.S.T. 115/60	17.70
R182B	Universal-Load Circuit, S.P.D.T. 115/50	20.80
R182C	Universal-Load Circuit, D.P.D.T. 115/60	22.60
R882A	Series 80 Relay—S.P.S.T. No Trans. 24/60	15.00
R882B	Series 80 Relay—S.P.D.T. No Trans. 24/60	16.50
R882C	Series 80 Relay—D.P.D.T. No Trans. 24/60	17.00

PARAGON TIME CONTROLS

Straight On and Off Time Switches
3000 Series Indoor Type



Single and Double Pole
3000 Watts Capacity

Industrial type, self-starting motor; shock-proof terminal block. Accurate and dependable for controlling signs, commercial lights, show window lights, stokers, burners, valves, motors and other equipment. Furnished with two tripper dials as standard. A total of 14 trippers may be added for additional operations. Steel case with hasp for padlock and seal. Size, 7⅜ x 4⅛ x 3¼ inches. Shipping weight, 3 lbs., 6 oz. Paragon 3000 Series Time Switches carry full Underwriters' Laboratories approval for their rated capacities. They are designed, built and guaranteed by the largest time-control manufacturer in the country.

Prices (Schedule No. 1)

Cat. No.	Voltage Cycle	Type Switch	Amps.	Price Each
3001	120	SPST	30	$10.95
3002	240	SPST	30	11.95
3003	120	DPST	30	12.95
3004	240	DPST	30	13.95
3005	120	SPDT	30	12.95
3006	240	SPDT	30	13.95
3007	24	SPDT	30	14.95

For 25 or 50 cycle motors add $1.00 to price.

3300 Series Outdoor Type



• Heavy duty industrial self-starting motor. • For outdoor signs, yard lighting. • For traffic and street lighting.

Heavy duty outdoor type, same as 3000 Series above but housed in special "breather" type case in baked gray enamel over zinc chromate undercoat. Powered with heavy-duty motor lubricated for life with low temperature oil. Size: 9⅝" x 5⅜" x 4½" overall. Shipping weight 3 lbs., 6 oz.

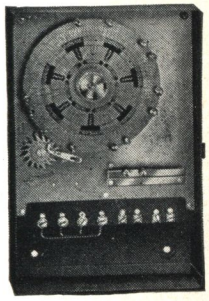
Prices (Schedule No. 1)

Model No.	Voltage 60 cycle	Switch	Amps.	List Price
331	120	SPST	30	$22.00
332	240	SPST	15	23.00
333	120	DPST	30	24.00
334	240	DPST	15	25.00

No extra charge for 4 tripper dials, when specified on order. For 25 or 50 cycle motors, add $1.00 to list price.

For full 3000 Series data, write for Bulletin 5612.

PARAGON 700 Series - 7 Day Calendar Dial Time Switches



• Provides individual settings for each day in the week. • With Sunday and holiday cutout. • Set an entire week's program in advance.

Designed for automatic control of heating, ventilating and air-conditioning systems in public buildings, schools, churches, factories, etc. Widely used for control of machine warmup, glue pots, linotype machines, etc., on a weekly schedule in accordance with daily operating or working schedules. The 7-day dial is large and easy to set. Operations can be set to occur as close as 3 hours apart. Surface-mounting case, 12-5/16" x 8⅛" x 3-15/16".

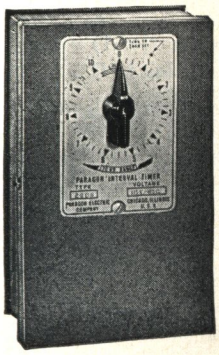
Prices (Schedule No. 1)

120 Volts, 60 Cycles, A. C.

Model No.	Switch	Amperes Per Pole	Watts Per Pole	List Price
702-40	DPST	35	4000	$36.50
703-10	SPDT	10	1000	29.50
703-40	SPDT	35	4000	36.50
704-10	DPDT	10	1000	33.50

For 120 volt, 25 or 50 cycle; 240 volt 50 or 60 cycle; 24 volt, 50 or 60 cycle motors add $1.00 to list prices. For 240 volt, 25 cycle motors add $2.50 to list prices. 14 dial riders furnished as standard. Extra dial riders, $0.25 each net.

PARAGON 2900 Series Wall Mounting Interval Timer



• SELF-STARTING, SYNCHRONOUS

Manually preset interval timer for industrial control of plastic moulding, batch mixing, rubber curing, conveyor operations and other applications. Timer mechanism mounted to cover, with inner terminal block for easy installation.

SPDT switch, capacity 1000 watts, non-inductive load. All models single pole, double throw. Can be equipped with bulls eye, signal buzzer, stop-start switch, etc. 8" x 5" x 3-5/16" surface-mount case.

Shipping weight 5 lbs.

Prices (Schedule No. 4)

120 Volt, 60 Cycle Motor

Capacity: 10 Amps., 1000 Watts, non-inductive load.

Model No.	Range of Adjustability	Dial Grad.	List Price
2904	0 to 5 min.	5 sec.	$21.50
2905	0 to 15 min.	15 sec.	21.50
2906	0 to 30 min.	30 sec.	21.50
2907	0 to 60 min.	1 min.	21.50
2908	0 to 5 hour	5 min.	21.50
2909	0 to 10 hour	15 min.	21.50
2910	0 to 20 hour	30 min.	25.00

For 240 volt, 50 or 60 cycle; 24 volt, 50 or 60 cycle; or 120 volt 25 or 50 volt motors add $1.00 to list price. Can be equipped with buzzer, signal light, timer start and signal stop switch at slight additional charge. Write for quotations.

PARAGON 'de-frost-it' Home Refrigerator Defroster



Use Model No. DT-21X 'de-frost-it-90' when refrigerator outlet is hard to reach—complete with safe cord.

Use direct plug-in Model No. DT-21XP 'de-frost-it-80' when outlet is exposed—easy to reach.

SAVE FOOD, 'de-frost-it' keeps foods fresh longer.
SAVE TIME, No more chopping at thick frost.
SAVE ELECTRICITY, Refrigerators run less, last longer.

Shipping Weight
1¾ lbs. each

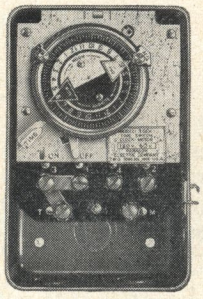
(Schedule No. 3) Packed
6 to a Dealer Carton

Either 'de-frost-it' model converts home electric refrigerators to fully automatic nightly defrosting in less than one minute. Keeps the freezer free of frost and at top efficiency. Helps maintain refrigerator humidity. Keeps food fresh longer and saves electricity. Defrosting periods completely adjustable to meet individual needs. Will not thaw frozen foods kept in evaporator. Easy "skip-defrost" for storing ice cream and frozen desserts over night.

Modern style case finished in gleaming white with gold dial plate and red knob. Size, 2⅝ x 2⅜ x 4⅛ inches. 5 Amp., 1/3 H.P. capacity. Shipping weight, 1½ lbs.; packed 6 per dealer carton.

Model No.	Description	Price Each
DT-21X 'de-Frost-it'-90	With cord and plug	$9.95
DT-21XP 'de-Frost-it'-80	Direct plug-in	$8.95

PARAGON Dependable Poultry Time Switches



MODEL PS-30

For any lighting schedule. 4-tripper dial for morning and evening lighting. With dimming circuit.



MODEL PIP

Same as PS-31, but portable. Receptacles for "bright" and "dim" circuits at bottom of case, with Time Switch cord for plugging into convenient outlet.

• Models PIP and PS-30 feature lighting control for morning only or evening only, or both morning and evening lighting with dimming circuit.

Controlled artificial lighting increases egg production during the fall and winter months when egg prices are highest.

Paragon Poultry Lighting Time Switches are ideal for every accepted method of artificial lighting, either morning only or evening only or both morning and evening lighting programs.

Models PS-30 and PIP provide the important 20 minute evening dimming period for safe roosting before "lights out".

For full information on Poultry House Lighting, including the proper method of installing lights, write for Bulletin 5511. Shipping Wgt. Models PS-30 or PIP, 3½ lbs.

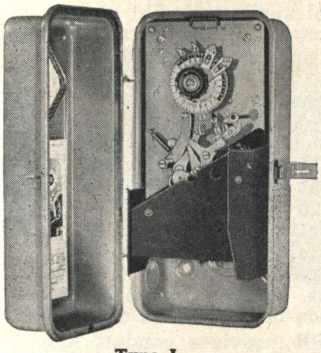
Prices (Schedule No. 1)
120 Volts, 60 Cycle, A. C.

Model No.	Type	Watts per pole Bright	Dim.	List Price
3001	Morning lighting only	3000	....	$10.95
PS-30	Morn. or Eve.; or both.	3000	1000	11.95
PIP	Morn. or Eve.; or both With dimming circuit. (Portable Plug-In)	700	700	13.95

For 120 Volt 50 cycle, or 240 volt 50 or 60 cycle add $1.00 to list price.

SANGAMO TIME SWITCHES

TYPE L—SYNCHRONOUS



Type L
(Supersedes KA)

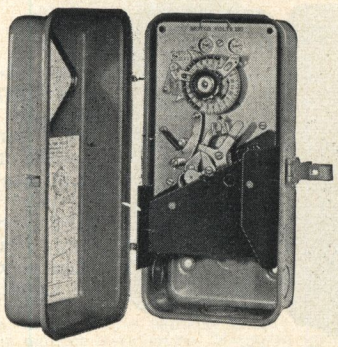
Sangamo hysteresis, high-torque self-starting synchronous motor, low speed 450 r.p.m. unaffected by extreme temperatures.

Heavy silver contacts, conservatively rated at 35 amperes on Types 11, 12, 21. Two pairs of setting levers, 90 minutes between "off" and "on," 30 minutes between "on" and "off." Reversed time limits if ordered. Gasket sealed, rain proof case.

Dimensions: 10¼ inches high, 5¼ inches wide, 4 inches deep overall. Shipping weight, approximately 7 lbs.

Type	Poles	Throw	AC Amperes per circuit	List Price
L-11	Single	Single	35	$31.70
L-21	Double	Single	35	35.00
L-31	Triple	Single	6	42.00
L-12	Single	Double	35	35.00
L-22	Double	Double	6	39.00
L-32	Triple	Double	6	45.00
LZ,	Astronomic Dial (Specify latitude), add			14.00
LH,	"On" Omitting Device, add			3.00
LF,	"Off" Omitting Device, add			3.00
LHE,	Advance Time Cutoff, add			8.00
LO,	Weatherproof-windowless Case, add			27.50
LR,	Extra Setting Levers, per pair			1.00
LG,	Reverse Time Limits, no extra charge.			

TYPE W—SYNCHRONOUS CARRYOVER



Type W
(Supersedes VSW)

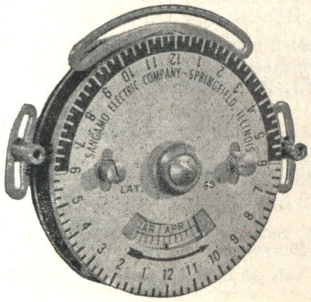
Type W, by combining synchronous timing with reserve spring clock operation, provides accurate timing during power shortages up to 10 hours and eliminates necessity of resetting of dial.

A new positive action thermal-blocking device releases the reserve timing movement during service interruptions. When power is restored, the synchronous motor resumes the timing operation and re-winds the spring of the clock movement. In all other respects, the specifications of Type L apply.

Type	Poles	Throw	AC Amperes per circuit	List Price
W-11	Single	Single	35	$55.70
W-21	Double	Single	35	59.00
W-31	Triple	Single	6	66.00
W-12	Single	Double	35	59.00
W-22	Double	Double	6	63.00
W-32	Triple	Double	6	69.00
WZ,	Astronomic Dial (Specify latitude), add			14.00
WH,	"On" Omitting Device, add			3.00
WF,	"Off" Omitting Device, add			3.00
WHE,	Advance Time Cutoff, add			8.00
WO,	Weatherproof-windowless Case, add			27.50
WR,	Extra Setting Levers, per pair			1.00
WG,	Reverse Time Limits, no extra charge.			

Standard motors: Specify 120 or 240 volts, 60 cycle.

Special motors: 25 or 50 cycle, add $1.00; 24 volt (60 cycle), add $1.00, 480 volt (60 cycle) on 11, 12, 21 types add $10.00.



ASTRONOMIC DIAL

When a Sangamo Time Switch is fitted with an Astronomic Dial it will automatically turn lights "on" at sunset and "off" at sunrise, compensating progressively day by day for the change in seasons. Or, this dial permits the "off" operation at any time between 9:30 p.m. and 2:15 a.m.

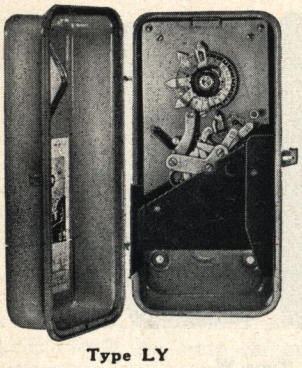
Ideal control for: outdoor advertising, street-, flood-, air beacon-, light house-, and yard-lighting.

For latitudes 20°, 27½°, 30°, 32½°, 35°, 37½°, 40°, 42½°, 45°, 50°, 52°, add $14.00. The latitude or geographic location must be specified.

SANGAMO TIME SWITCHES

2-CIRCUIT TYPES LY AND WY

(Supersedes KAY and VSWY)



Type LY

The synchronous Type L and carry-over Type W in two circuit construction. The "on" and "off" operations of each circuit are independent, (except when Omitting Device or Astronomic Dial is required). Equipped with 2 pairs of tripping levers.

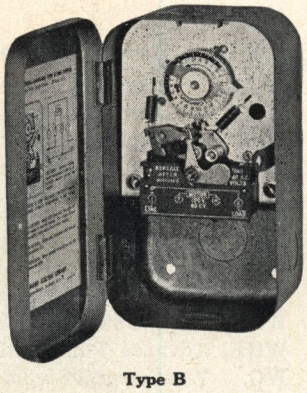
Type	Description	Amp.	List Price
LY-11	Two Circuit	35	$43.00*
WY-11	Two Circuit	35	67.00*

* Standard Motor: Specify 120 or 240 volt, 60 cycle.

Special Motors: 25 or 50 cycle, add $1.00; 24 volt, add $1.00; 480 volt, add $10.00.

For other optional features refer to listing of Types L and W.

TYPE B TIME SWITCH



Type B

The Type B time switch is powered by the same Sangamo-built, slow-speed, hysteresis motor used in Sangamo heavy duty switches. The Type B has a NEMA Standard rating of 30 amperes, and is of single-pole, single-throw construction. It has long-life silver contacts and a service-tested timing mechanism that runs quietly and efficiently, and needs no maintenance. Four easy-setting levers provide for two ON and two OFF operations daily; trippers also may be stacked for single ON and OFF operations. Dial setting is simple, and hand tripping does not affect the ON and OFF functions of the trippers.

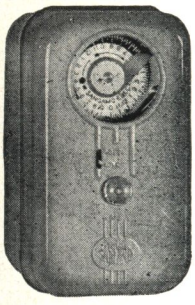
The Type B switch is of dead front safety construction, being housed in a sturdy, all-steel case with hinged cover and sealable hasp; no glass to break. Almost one-half the inside space is obstruction-free for speedy wiring, and there are four convenient ½"-¾" multiple knockouts located in back, bottom and sides. A single keyhole slot in back of case makes mounting simple. Overall dimensions: height, 7¼"; width, 4¼"; depth, 3⅛". Shipping weight: 2 pounds, 3 ounces.

Type	No. of Operations	AC Rating	All-Steel Case Each
B	2 ON and 2 OFF	120 V. 30 Amp. 240 V. 15 Amp.	$13.50*

* Standard motor: 120 volt, 60 cycle. Special motor: 240 volt, add $1.00; 50 cycle, add $1.00.

SANGAMO TIME SWITCHES

TYPES SR & SJ



Type S

Compact, economical time switches for commercial or residential applications.

Sangamo synchronous, self-starting, slow speed 450 R.P.M. motor. Precision machined gears. Single pole single throw contacts operated by lever action. Standard mounting types rated at 15 amperes AC; plug-in type at 10 amperes or ¼ HP. at 120 volts AC.

Time-setting levers can be set in 15 minute steps; 30 minute minimum interval between operations. On Type SR the two ON periods may occur as close together as 2 hours.

Type SR provides conduit knockout on bottom, pryout on back for wiring. Mount on wall or switch-box. Type SJ supplied with 6 foot plug-in cord and built-in receptacle for portable use. Both types for operation in an upright position.

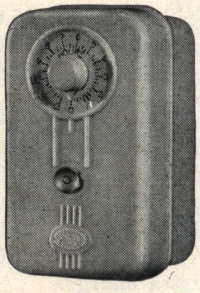
Overall dimensions: height 5⅝ inches, width 3 inches, depth 3 inches. Shipping weights: Type SR, 2 pounds; Type SJ, 2¼ pounds.

Type	No. of Operations	AC Rating	Ivory Each	Brown Each
SR	2 ON and 2 OFF	15 amp.	-------	$13.50*
SJ	1 ON and 1 OFF	10 amp. or ¼ HP.	$15.75†	----------

* Standard motor: 120 volt, 60 cycle. Special motors: 24 or 240 volt, add $1.00; 25 or 50 cycle, add $1.00.

† Standard motor: 120 volt, 60 cycle. Special motors: 120 volt, 25 or 50 cycle, add $1.00.

TYPES T & TJ TIMERS



Type T

Interval timer for control of attic fans, unit heaters, air conditioners and appliances.

Types T & TJ timers provide an automatic OFF operation following a manually-set ON period. Two ranges are available: T-12H, adjustable interval from 15 minutes to 12 hours; and T-30M, adjustable interval from 1 to 30 minutes.

Two mounting designs are available: Type T, for switch-box or wall installation; Type TJ, with plug-in cord and built-in receptacle for portable use. Both types to be operated in an upright position.

Sangamo synchronous, self-starting, low speed 450 R.P.M. motor. Precision machined gears.

Contacts are single pole single throw, normally open. Type T rated at 15 amp. AC; Type TJ rated at 10 amperes or ¼ HP. at 120 volts AC.

Overall dimensions: height, 5⅝ inches; width, 3 inches; depth, 3¼ inches. Shipping weights: Type T, 2 pounds; Type TJ, 2¼ pounds.

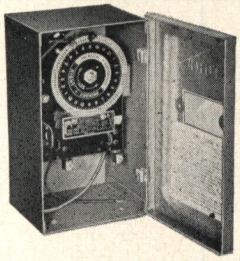
Type	Interval	AC Rating	Ivory Each
T-12H	15 min. to 12 hrs.	15 amp.	$13.50*
T-30M	1 min. to 30 min.	15 amp.	13.50*
TJ-12H	15 min. to 12 hrs.	10 amp. or ¼ HP.	15.75†

* Standard motor: 120 volt, 60 cycle. Special motors: 24 or 240 volt, add $1.00; 25 or 50 cycle, add $1.00.

† Standard motor: 120 volt, 60 cycle. Special motors: 120 volt, 25 or 50 cycle, add $1.00.

TORK TIME SWITCHES

STANDARD LINE



Model 1191

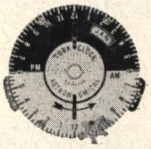
The standard or quality line of TORK switches provides a variety of switching and timing to meet any Light or Power application. Models are available with plain dial (ON & OFF Daily), Astronomic Dial (ON at sunset), Skip-A-Day Dial (skips days) and Seven Day Dial (different daily settings). Astronomical Dial turns ON at sunset the year around without attention. Turns OFF from 10:30 P.M. to 1:30 A.M. . . . or at sunrise. Skip-A-Day and Seven Day Dials are a must for commercial applications where operation varies or is not desired every day in the week. Telechron motored with all-brass gearing for extra long life. Single and double pole models carry a 35 ampere 3500 watt incandescent lamp load rating. Lug terminals take any wire size down to and including #8 without bending. Combination ½", ¾" & 1" knockouts are provided on all four sides and back of the indoor enclosure. Flush and outdoor enclosures also available.

Amps.	Desc.	Model	Price
35	SPST	1191	**13.95**
35	DPST	1962	**15.95**
25	3PST	1963	**24.95**
15	SPDT	1197	**16.95**

FEATURES



PLAIN DIAL
(ON and OFF Daily)



ASTRONOMICAL DIAL
(ON at Sunset)



SKIP-A-DAY DIAL
(Weekend or Holiday Cutout)



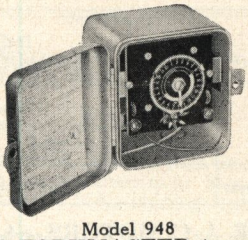
SEVEN DAY DIAL
(Different Daily Settings)

TORK's 3 Pole model will switch three 120 volt circuits or a 3 phase 1½ HP motor load. On larger motors use across-the-line magnetic motor starters with an SPST TORK Switch controlling the coil. A SPDT switch must be used with mechanically-held contactors. DPDT, 2 circuit and momentary contact models also available.

Add $2. for 220 v. motor. Motor operates at 20° below zero, an important factor in outdoor installations. Minimum setting 45 minutes (15 minutes with special tripper)—manual operation any time. Indoor enclosure 8¼"x5"x4¼". Extra tripper arms 50c per pair. Shipping weight 5 lbs.

Astronomical	Add "Z"	**$15.00**
Skip-A-Day	Add "SK"	**3.00**
Seven Day	Add "7D"	**8.00**
Astronomical—Skip-A-Day	Add "ZSK"	**20.00**

TORKMASTER LINE



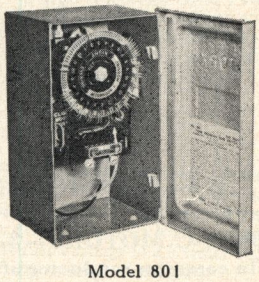
Model 948

The economical TORKMASTER turns any electrical circuit on and off automatically. Its 30 ampere, 3000 watt incandescent lamp load rating and 1 HP motor rating make it suitable for any daily lighting or power application. Telechron motored with all-brass gearing. Guaranteed 3 years!

Add $2. for 220 v. motor. Motor operates at 20° below zero, an important factor in outdoor installations. Minimum setting 2 hrs., 15 minute adjustments. Indoor case 5¼" high, 4¾" wide, 3½" deep. Double pole Model provided with large Standard Line Case. Shipping weight 3 lbs.

Amps.	Desc.	Model	Price
30	SPST	948	**$10.95**
30	DPST	954	**12.95**

PROGRAM TIME SWITCH



Model 801

The TORK Program Series provides multiple ON-OFF operations in 15 minute settings. Adjoining 15 minute tabs keep operations ON continuously . . . no tabs—no operation. Many and varied ON & OFF times can be programmed to suit. Skip-A-Day feature also available. Special models with dial speeds from 1 minute to 1 week available. 40 tabs supplied with each switch. Equipped with extra heavy duty motor; add $2. for 220 v. Shipping weight 5 lbs.

10	SPST	801	**$19.95**
10	DPST	802	**24.95**
10	SPDT	807	**21.95**

SWITCHMASTER LINE



Model 24H61191

The versatile TORK Switchmaster has revolutionized the timing of Commercial Refrigeration, Automatic Poultry Feeding. Well Pumping and many other applications. Equipped with both a one hour and 24 hour dial, it offers extremely fine selectivity. The one hour dial turns ON on-the-hour and turns OFF as set from two to 55 minutes after the hour . . . this operation occurs **only during the hours selected** on the 24 hour dial. Equipped with special heavy duty motor; add $2, for 220 v. Shipping Weight 5 lbs.

30	SPST	24H61191	**$24.95**
30	DPST	24H61962	**26.95**
30/15	SPDT	24H61197	**27.95**

MOTOR CURRENTS

Rated Output	INDUCTION TYPE Squirrel-Cage and Wound Rotor					SYNCHRONOUS TYPE 100% Power Factor*			
	Rated Voltage—Volts					Rated Voltage—Volts			
	110	220†	440	550	2300	220	440	550	2300
Horse Power	Full-Load Current‡-Amperes					Full-Load Current‡-Amperes			
2-PHASE A-C MOTORS—4-WIRE									
½	4.0	2.0	1.0	0.8					
¾	4.8	2.4	1.2	1.0					
1	6.4	3.2	1.6	1.3					
1½	8.8	4.4	2.2	1.8					
2	11.2	5.6	2.8	2.2					
3		8	4	3.2					
5		13	7	6					
7½		19	9	8					
10		24	12	10					
15		34	17	14					
20		45	23	18					
25		55	28	22	6	47	24	19	4.7
30		67	34	27	7.5	56	29	23	5.7
40		88	44	35	9	75	37	31	7
50		108	54	43	11	94	47	38	9
60		129	65	52	13	111	56	44	11
75		158	79	63	16	140	70	57	13
100		212	106	85	21	182	93	74	17
125		268	134	108	26	228	114	93	22
150		311	155	124	31		137	110	26
200		415	208	166	41		182	145	35
2-PHASE A-C MOTORS—3-WIRE									
Current in common conductor of 2-phase, 3-wire system = 1.41 times value given above.									
3-PHASE A-C MOTORS									
½	4.0	2.0	1.0	0.8					
¾	5.6	2.8	1.4	1.1					
1	7	3.5	1.8	1.4					
1½	10	5.0	2.5	2.0					
2	13	6.5	3.3	2.6					
3		9	4.5	4					
5		15	7.5	6					
7½		22	11	9					
10		27	14	11					
15		40	20	16					
20		52	26	21					
25		64	32	26	7.0	54	27	22	5.4
30		78	39	31	8.5	65	33	26	6.5
40		104	52	41	10.5	86	43	35	8
50		125	63	50	13	108	54	44	10
60		150	75	60	16	128	64	51	12
75		185	93	74	19	161	81	65	15
100		246	123	98	25	211	106	85	20
125		310	155	124	31	264	132	106	25
150		360	180	144	37		158	127	30
200		480	240	192	48		210	168	40

*For 90% and 80% power factor, multiply table values by 1.10 and 1.25, respectively.

†For 208- and 200-volt, 3-phase motors, increase the corresponding 220-volt motor full-load current by 6% and 10%, respectively.

‡These values of full-load current are for motors running at speeds usual for belted motors and motors with normal torque characteristics. Motors built for especially low speeds or high torques may require more running current, in which case the nameplate current rating should be used.

Compiled from National Electrical Code, 1951, Table 23 (2-phase) and Table 24 (3-phase).

Courtesy, Anaconda Wire and Cable Company

General Information on AC and DC Motors

The relation of the horsepower (hp.), the volts (E), the amperes (I) and the efficiency in per cent (e) of the electric motor is expressed by the formula

$$\text{hp.} = \frac{EIe}{746}$$

This formula contains four quantities indicated by letters; if any three are known or can be assumed, the other one can be found. Efficiencies of industrial motors can be assumed at from 80% to 90%, depending upon the size.

For example, to determine the current required by a 10 hp., 220-volt motor of which the efficiency is unknown, assume 85% as an approximate value and apply the formula:

$$10 = \frac{220 \times I \times .85}{746}$$

$$\text{Therefore } I = \frac{10 \times 746}{220 \times .8} = 40 \text{ Approx.}$$

A rough approximation in determining the current required by direct-current motors is as follows:

8 amperes per hp. for 110–115-volt motors.

4 amperes per hp. for 220–230-volt motors.

1¾ amperes per hp. for 500-volt motors.

HORSEPOWER.—Is a measure of the time rate of doing work and is defined as the equivalent of raising 33,000 pounds one foot in one minute. 1 hp. is equivalent to 746 watts.

TORQUE.—Is the pull or turning moment required in applying power by rotation and varies inversely as the radius at which the power is applied. The torque T is expressed in pounds at one foot radius, sometimes called pound-feet.

FULL LOAD TORQUE.—Is the turning moment required to develop full rated output of a motor of given horsepower at a given speed.

The torque T of any motor at any output expressed in pounds at one foot radius can be found by means of the following formula:

$$T = \frac{5250 \times \text{hp.}}{\text{rpm.}}$$

Conversely if the torque in pounds at one foot radius is known, the horsepower at any given speed can be determined from the formula:

$$\text{H.P.} = \frac{T \times \text{RPM.}}{5250}$$

STARTING TORQUE.—Is the turning moment a motor will develop in starting when impressed with a given starting voltage. Starting torque is usually expressed in terms of full load torque, as 2 times full load torque, etc.

PULLOUT TORQUE.—Or maximum running torque, is the maximum turning moment a motor will develop under running conditions. The P.O. torque of a wound rotor induction motor may be 80% of the maximum starting torque, while the P.O. torque of a squirrel cage induction motor will exceed the maximum starting torque, in some cases by as much as 100%. P.O. torque is usually expressed in terms of full load torque.

EFFICIENCY.—Is the ratio of the useful "output" of a machine to its total "input."

APPARENT POWER.—In an alternating-current circuit is the product of the readings of the voltmeter and ammeter and is ordinarily expressed as kv-a. This value may be greater than the reading at the same time on the wattmeter.

True power in an alternating current circuit is the average value of the products of the coincident instantaneous values of the current and voltages for a complete cycle as indicated by the readings of a wattmeter and is ordinarily expressed in kw.

Power factor is the ratio of the true power (kw. or wattmeter reading) to the apparent power (kv-a. or product of voltmeter and ammeter readings). The ratio is usually expressed in per cent and cannot be greater than 100%.

General Information on AC and DC Motors

Continued

If true power is expressed in kilowatts (kw.) and apparent power as the product of kilovolts (1000 volts) and amperes or kv-a.

$$\text{Power factor (P. F.)} = \frac{\text{kw.}}{\text{kv-a.}}$$

For estimating purposes, power factors can be assumed as follows, except on long transmission lines; incandescent lighting load, no motors, 95%; lighting and motors, 85%; motors only, 80%.

Measurement of Power—If W = watts, E = average volts between line terminals, I = average line current, and P. F. = power factor expressed as a decimal fraction, the following formula represent their relations:

Single-phase $W = EI \times P.F.$
Two-phase $W = 2EI \times P.F.$
Three-phase $W = 1.732\ EI \times P.F.$

Current—From the above formula the current can be found as follows:

Single-phase $I = \frac{W}{E \times P.F.}$

Two-phase $I = \frac{W}{2E \times P.F.} = \frac{.5\ W}{E \times P.F.}$

Three-phase $I = \frac{W}{1.732\ E \times P.F.} = \frac{.578\ W}{E \times P.F.}$

Effect of Changes of Voltage and Frequency

The starting torque of an induction motor will vary as the square of the voltage applied to the primary: hence, the primary voltage required to produce a given starting torque can be determined by means of the formula:

$$V^1 = V\sqrt{\frac{T^1}{T}}$$

Where V^1 and T^1 signify required voltage and torque respectively, V, the full rated voltage, and T, the starting torque at full voltage. For example: if a squirrel cage induction motor is required to start with full load torque only, and if the starting torque at full voltage is 2.5 times full load torque (2.5 F.L.T.) the starting voltage should be:

$V^1 = V\sqrt{\frac{1}{2.5}} = .63V$; that is, the starting voltage should be 63% of full voltage.

The starting current of squirrel cage induction motors depends on the starting voltage applied and is independent of the torque required to start the load; the current falls almost immediately, however, to the value corresponding to the required torque and then decreases more gradually as the motor speed accelerates. From this, it follows that the starting voltage should not be greatly in excess of that required for the torque.

Wound rotor motors when started by means of resistance in the secondary circuits can usually be accelerated to full speed with full load torque with current little in excess of full load current.

A variation in either voltage or frequency not exceeding 10% is generally permissible with any induction motor. Such variations are always accompanied by changes from normal performance with either the voltage or the frequency differing from normal; the following performance change will be obtained:

Character of Change	Effect on Power Factor	Torque	Slip	Efficiency
Voltage higher	Decreased	Increased	Decreased	Decreased
Voltage lower	Increased	Decreased	Increased	Increased
Frequency higher	Increased	Decreased	% slip unchanged	Increased
Frequency lower	Decreased	Increased	% slip unchanged	Decreased

The voltage and frequency should not be varied simultaneously in opposite directions, that is, one increased and the other decreased, if an induction motor must operate on frequency other than standard, the performance will be better if the voltage is changed in proportion to the square root of the frequency. For example: a 220-volt, 60 cycle motor, operating on 50 cycles, will have very nearly its normal performance if the voltage is decreased to $220 \times \sqrt{\frac{50}{60}} = 200$.

USEFUL INFORMATION

ALTERNATING CURRENT GENERATORS AND MOTORS

Alternating Current Generators are built in two types, the revolving field and revolving armature types. The names of the two sets of windings are rotor and stator. The revolving field type machine is mostly used, because of the field current only having to pass through the brushes and collector rings, the high tension wires all being stationary.

Alternating Current Generators are separately excited. That is, the field current is supplied from an auxiliary Direct Current Generator, known as an exciter.

Current supplied from an Alternating Current Generator alternates in direction at regular intervals, and from this characteristic is derived the terms "frequency" or "cycles," which always has a numerical value which defines the period of the alternations. The most generally adopted systems operate at either 60 cycles, 7200 alternations, or 25 cycles, 3000 alternations, while there are some Central Stations which supply either 40 cycle, 50 cycle, or 133 cycle current.

Alternating current is generated single, two or three phase, two and three phase systems being the most commonly used. They are better adapted for operating large motors. The three phase system has been universally adopted on account of economy in construction and operation. Single phase systems require two wires, two phase systems either three or four wires, and three phase systems three and four wires.

Alternating Current Motors are constructed single, two or three phase, and of many different types, and for all frequencies and synchronous speeds.

Single-Phase Motors: Single-phase motors are built in several different types, viz.: Repulsion, Repulsion Induction, and Induction Types, being used for constant or variable speed service.

Repulsion Induction motors are the most generally used of all single-phase motors and furnished for constant and variable speed.

Polyphase Induction Motors: Polyphase Induction Motors are built in two types, viz.: Squirrel Cage and Slip Ring or Wire Wound Rotor Types.

Squirrel Cage Rotor Type motor has nearly a constant speed (starting torque high), and is the type most generally used for driving machinery.

Slip-ring motor is adapted for speed variation ranging from 50% to 100%, and is also used for constant speed service. It has a high starting torque with a low starting current demand, which particularly adapts it for any service where a heavy starting current is objectionable.

Both the Squirrel Cage and Slip-ring type motors can be supplied for any frequency, voltage or speed.

Starting Torque: The starting torque of a constant speed motor is twice full load torque on full voltage. In general the torque varies as the square of the applied voltage. The reason for using a reduced electromotive force at starting is to reduce the sudden shock which may throw off belts or cause mechanical injury, and to reduce the starting current. When 50% voltage is applied to the motor, half full load torque is given.

Synchronous Motors are principally used for power factor correction and are also sometimes called "Synchronous Condensers," because they can be operated at a leading current to raise the power factor of an alternating current system. Synchronous motors for driving power are equipped with an extra starting winding, which will give from 30% to 50% full load torque, and will operate at a constant or synchronous speed with no slip. It is advisable to have one or more synchronous motors on all alternating current systems. Each case requires a particular calculation to fit it with the proper sized motor for the conditions and should be referred to those familiar wth synchronous motor installations.

Starting of Synchronous Motors: The starting of synchronous motors differs from the starting of induction motors, due to the fact that they have a field which is supplied from an auxiliary, known as an exciter.

Before starting the motor, first see that the field discharge switch is open from the field of the motor, but the motor field must be short circuited through the field discharge resistance. Otherwise, there will be a high voltage discharge between the field coils when the current is thrown on the motor, which is due to a transformer action between the windings. After seeing that the field switch is in its proper position, set the field rheostat at a point to give zero power factor when the switch is thrown in. After these precautions have been taken, the motor is ready to start, and should come up to speed on throwing the compensator into the starting position. When the motor has attained full speed, throw the compensator into running position, and then close the field switch, when the motor will step into synchronism. After this the rheostat should be set for full field current, and the motor will then operate "leading."

To stop the motor, first turn the rheostat back to the zero power factor position, then open the field switch and throw off the compensator, the switches and rheostat being in position for next starting.

If a synchronous motor which has sufficient starting torque to meet the load conditions should fail to start when the current is thrown into the stator windings, it is probably due to the "standing" relation of the field to the stator windings, because of there being an equal number of stator to rotor coils, and should they both be in a central position to each other, the rotor will not have any starting torque. To remedy this move the rotor a slight distance in either direction, and the motor will then start.

USEFUL INFORMATION

ALTERNATING CURRENT FORMULAS

Power Factor of an Alternating-Current is the Number by which the Apparent Power in the Circuit (Volts Times Amperes) must be Multiplied Together in Order to Ascertain True Power. When an Alternating-Current Circuit Contains Inductance, the Current Lags Behind the E. M. F., and when it Contains Capacity the Current Rises Ahead of the E. M. F.; in each case the Current and E. M. F. Reach their Maximum Values at Different Instants, and the Product of the E. M. F. and Current at any Instant is Less than it would be if the Two were in Phase with Each Other. If the E. M. F. and Current be Measured Separately the Voltmeter and Ammeter will give the Individual Mean Effective Values; if they are Measured by a Wattmeter, the Instrument Indicates their Combined Effect Synchronously, not the Product of their Effective Values which Occur at Different Instants. Consequently, the Wattmeter Indication will be Less than the Product of the Separate Voltmeter and Ammeter Readings; the Ratio of the Power to this Product is the Power Factor of the Circuit. Expressed as a Formulæ:

$$\text{Power Factor} = \frac{\text{Watts}}{\text{Amperes} \times \text{Volts}}$$

This Gives Rise to the Two Methods of Rating Electrical Apparatus, One on the Basis of Watts or Kilowatts, and the Other on the Basis of Volt-Amperes or Kilovolt-Amperes (K. V. A).

The former Represents Actual Power, Usually in K. W., while the Latter represents the Apparent Power, usually in K. V. A. (Kilovolt Ampere), Generated, Transmitted or Used by the Apparatus. The Latter or K. V. A. Rating is Coming into More General Use Since it Represents More Adequately the Voltage and Current Conditions to which the Apparatus is Subjected.

Current per Phase in Various Systems

$I = \frac{W}{E \times P.F.}$ for Single-Phase Circuit.

$I = 0.50 \times \frac{W}{E \times P.F.}$ for Two-Phase Circuit.

$I = 0.58 \times \frac{W}{E \times P.F.}$ for Three-Phase Circuit.

Temp. C.=5/9 (Temp. F.—32)

Temp. F.=9/5 Temp. C.—32

I=Current in Line in Amperes; W=Energy Delivered in Watts; E=Potential between Mains in Volts; P. F.=Power Factor. When Power Factor cannot be Accurately Determined it may be Assumed as Follows: Lighting Load with no Motors, 0.95; Lighting and Motors, 0.85; Motors Only, 0.80.

ALTERNATING CURRENT GENERATOR DATA

Speeds—Speeds are Standard to give the Desired Frequency. In Order to Obtain Speed of a 60-Cycle Alternator Divide 7,200 by the Number of Poles. To Obtain Speed of a 25-Cycle Alternator Divide 3,000 by the Number of Poles. 1,200 R. P. M. and 100 R. P. M. are the Maximum Standard Speeds.

Voltage—Standard Voltages are 240, 480, 600, 1,200 and 2,400.

Cycles or Frequency—

Standard Frequencies Most Used are 60-Cycles per Second (7,200 Alternations per Minute), and 25 Cycle, per Second (3,000 Alternations per Minute). To Obtain the Frequency of an Alternator in Cycles per Seconds the Formula is to Multiply the Speed by the Number of Poles and Divide by 120.

60-Cycle Alternators are Almost Entirely Used for Central Stations Lighting and Power.

25-Cycle Alternators are Used for Railway Operation.

Phase—Standard Alternators are Built for Three-Phase or Two-Phase.

Any Three-Phase Alternator will Deliver Continuously 70% to 75 % of its Three-Phase Capacity as Single-Phase Load Connected to any Two of its Three Terminals. The Third Terminal must be Left Disconnected. Two-Phase Machines should not be Used to Supply Single-Phase Current. The Usual Plant Conditions are Best Met by Three-Phase Alternators.

Amperes per Terminal—

Amperes per Terminal at 100% Power Factor are Determined in the Various Systems as Follows:

$$\text{One-Phase Amperes per Terminal} = \frac{\text{K.W.} \times 1000}{\text{Volts}}$$

$$\text{Two-Phase Amperes per Terminal} = \frac{\text{K.W.} \times 500}{\text{Volts}}$$

$$\text{Three-Phase Amperes per Terminal} = \frac{\text{K.W.} \times 580}{\text{Volts}}$$

Regulation—

Regulation is the Percentage Rise in Voltage when Load is Thrown Off, Speed and Excitation Remaining Constant. The Smaller the Rise, the Better the Regulation.

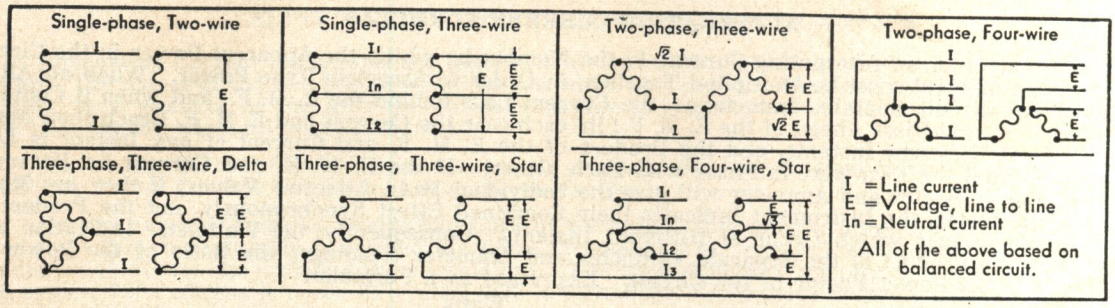
Wave Form—

By Accurate Shaping of the Pole Face and Slots Alternators Give a Wave Form Practically Identical with the Sine Wave, which is the Ideal.

Operation in Parallel—

Alternators of Different Manufacturers will Operate Successfully in Parallel with any Other Alternator, Provided the Angular Velocity does not vary more than 2½ Electrical Degrees, Lagging or Leading, from the Normal. Thus a Total Variation not Exceeding 5 Electrical Degrees is Allowable. An Electrical Degree is the Angle between Adjacent Poles Divided by 180.

A-C MOTOR WIRING INFORMATION



CURRENT, HORSEPOWER, KILOWATTS AND KILOVOLT-AMPERES

To Find the Value	When Value Below Is Known	SYSTEM			
		Direct Current	Single-Phase	Two-Phase, Four-Wire	Three-Phase
		FORMULAE			
Amperes (I)	Horsepower (Hp)	$I = \frac{746\ Hp}{E \times eff}$	$I = \frac{746\ Hp}{E \times eff \times pf}$	$I = \frac{746\ Hp}{2 \times E \times eff \times pf}$	$I = \frac{746\ Hp}{1.73 \times E \times eff \times pf}$
Amperes (I)	Kilowatts (Kw)	$I = \frac{1000\ Kw}{E}$	$I = \frac{1000\ Kw}{E \times pf}$	$I = \frac{1000\ Kw}{2 \times E \times pf}$	$I = \frac{1000\ Kw}{1.73 \times E \times pf}$
Amperes (I)	Kilovolt-Amperes (Kva)		$I = \frac{1000\ Kva}{E}$	$I = \frac{1000\ Kva}{2\ E}$	$I = \frac{1000\ Kva}{1.73\ E}$
Kilowatts Input (Kw)		$Kw = \frac{I \times E}{1000}$	$Kw = \frac{I \times E \times pf}{1000}$	$Kw = \frac{I \times E \times 2 \times pf}{1000}$	$Kw = \frac{1 \times E \times 1.73 \times pf}{1000}$
Kilovolt-Amperes (Kva)			$Kva = \frac{I \times E}{1000}$	$Kva = \frac{I \times E \times 2}{1000}$	$Kva = \frac{I \times E \times 1.73}{1000}$
Horsepower Output (Hp)		$Hp = \frac{I \times E \times eff}{746}$	$Hp = \frac{I \times E \times eff \times pf}{746}$	$Hp = \frac{I \times E \times 2 \times eff \times pf}{746}$	$Hp = \frac{I \times E \times 1.73 \times eff \times pf}{746}$

I = Line Current, Amperes
E = Line-to-Line Voltage, Volts
eff = Efficiency, decimals
pf = Power Factor, decimals

Kw = Input, Kilowatts
Kva = Input, Kilovolt-Amperes
Hp = Output, Horsepower

For two-phase, three-wire, balanced circuits, the amperes in common conductor = 1.41 × that in either of the other two.

REACTANCE, IMPEDANCE, CURRENT, VOLTAGE AND POWER FACTOR

Circuit Contains	Reactance	Impedance	Voltage	Power Factor
Resistance (R)	0	R	IR	1
Inductance (L)	$2\pi fL$	$2\pi fL$	$2\pi fLI$	0
Capacitance (C)	$\frac{1}{2\pi fC}$	$\frac{1}{2\pi fC}$	$\frac{I}{2\pi fC}$	0
Resistance and Inductance in series (R & L)	$2\pi fL$	$\sqrt{R^2+(2\pi fL)^2}$	$I\sqrt{R^2+(2\pi fL)^2}$	$\frac{R}{\sqrt{R^2+(2\pi fL)^2}}$
Resistance and Capacitance in series (R & C)	$\frac{1}{2\pi fC}$	$\sqrt{R^2+\left(\frac{1}{2\pi fC}\right)^2}$	$I\sqrt{R^2+\left(\frac{1}{2\pi fC}\right)^2}$	$\frac{R}{\sqrt{R^2+\left(\frac{1}{2\pi fC}\right)^2}}$
Resistance, Inductance and Capacitance in series (R&L&C)	$2\pi fL-\frac{1}{2\pi fC}$	$\sqrt{R^2+\left(2\pi fL-\frac{1}{2\pi fC}\right)^2}$	$I\sqrt{R^2+\left(2\pi fL-\frac{1}{2\pi fC}\right)^2}$	$\frac{R}{\sqrt{R^2+\left(2\pi fL-\frac{1}{2\pi fC}\right)^2}}$

E = Pressure or Voltage } volts.

I = Current, amperes.
R = Resistance, ohms.
L = Inductance, henries.

C = Capacitance, farads.
f = Frequency, cycles per second.
π = 3.1416.

Courtesy, Anaconda Wire and Cable Company

USEFUL INFORMATION

APPROXIMATE AMPERES PER TERMINAL PER WIRE for GENERATORS AND MOTORS, DIRECT AND ALTERNATING CURRENT

For Alternating Current Generators all figures are calculated on a unity power factor.

For Alternating Current Motors all figures are calculated on an average efficiency and power factor, such as are guaranteed by the manufacturers. No allowance has been made in these figures for starting conditions, all figures based on the actual full load running conditions. For proper fusing, etc., an allowance should be made.

H. P. of Motors	K. W. of Generators	110 Volts				220 Volts				440 Volts			
		D. C.	Single Phase	Two Phase	Three Phase	D. C.	Single Phase	Two Phase	Three Phase	D. C.	Single Phase	Two Phase	Three Phase
¼	.....	2.5	3.	1.5	1.7	1.3	1.5	.8	.8	.7	.8	.4	.5
½	.....	4.5	5.8	2.8	3.2	2.5	2.8	1.4	1.6	1.3	1.4	1.7	.8
1	.....	8.5	11.5	5.8	6.7	4.8	5.8	2.9	3.4	2.5	2.9	1.5	1.7
....	1	9.1	9.1	4.6	5.3	4.6	4.6	2.3	2.6	2.3	2.3	1.2	1.4
1½	.....	13.	17.	8.5	9.8	6.5	8.5	4.3	4.9	3.3	4.3	2.2	2.5
2	.....	16.4	19.4	9.7	11.4	8.2	9.7	4.8	5.7	4.1	4.9	2.5	3.
....	2	18.2	18.2	9.1	10.5	9.1	9.1	4.6	5.3	4.6	4.5	2.3	2.7
3	.....	24.2	30.4	15.2	17.6	12.1	15.2	7.6	8.8	6.1	7.6	3.8	4.5
....	3	27.3	27.3	14.	16.4	13.7	13.7	7.	8.2	6.8	6.8	3.4	4.1
5	.....	38.5	45.3	22.7	26.2	19.3	22.7	11.1	13.1	9.7	11.4	5.7	6.5
....	5	45.5	45.5	23.	26.3	22.8	27.7	11.5	13.2	11.4	11.4	5.7	6.6
7½	.....	56.5	66.	33.	38.2	28.3	33.	16.5	19.1	14.2	16.5	8.3	9.6
....	7½	68.2	68.2	34.	39.4	34.1	34.1	17.	19.7	17.	17.	8.5	9.9
10	.....	76.4	87.	48.8	50.5	38.2	44.1	21.8	25.3	19.1	22.	11.	11.2
....	10	90.1	90.1	45.	52.	45.	45.	23.	26.	22.5	22.5	11.3	13.
15	.....	115.	127.	63.5	73.3	57.3	63.5	31.8	36.7	28.7	31.8	15.9	18.4
....	15	137.	132.	78.3	78.7	84.3	84.3	42.2	39.4	42.2	42.2	21.1	19.7
20	.....	153.	174.	87.	102.	76.4	87.	43.5	51.	38.2	43.5	21.8	25.5
....	20	182.	182.	91.	106.	91.	91.	46.	53.	45.5	45.5	22.8	26.5
25	.....	192.	220.	110.	126.	96.	110.	55.	62.	48.	55.	27.5	31.
....	25	227.	227.	114.	132.	114.	113.	56.	65.7	57.	57.	28.4	32.9
30	.....	229.	261.	132.	151.	115.	130.	65.5	76.	58.	65.3	32.7	38.
....	30	273.	273.	137.	158.	137.	137.	68.3	79.	68.3	68.3	34.2	39.5
40	.....	306.	353.	177.	206.	153.	177.	88.3	103.	77.	88.3	44.2	51.5
....	40	370.	370.	185.	214.	185.	195.	93.	107.	93.	93.	46.5	54.
50	.....	373.	446.	223.	258.	187.	223.	112.	129.	93.5	112.	56.	64.5
....	50	455.	455.	228.	264.	227.	228.	111.3	132.	114.	114.	56.9	66.
75	.....	559.	660.	330.	382.	280.	330.	165.	191.	140.	115.	58.	96.
....	75	682.	682.	341.	395.	341.	341.	171.	198.	171.	171.	85.5	99.
100	.....	730.	850.	425.	492.	365.	425.	213.	246.	183.	213.	107.	123.
....	100	901.	901.	451.	520.	451.	450.	275.	260.	250.	250.	125.	130.
....	125	.....	.....	568.	655.	569.	568.	284.	328.	284.	284.	142.	164.
....	150	.....	.....	683.	789.	683.	683.	342.	395.	342.	342.	171.	198.
....	175	.....	.....	747.	920.	797.	797.	289.	460.	398.	399.	200.	230.
....	200	.....	.....	.....	.....	910.	910.	435.	526.	455.	455.	278.	263.
....	250	.....	.....	.....	.....	.....	.....	566.	668.	569.	566.	288.	334.
....	300	.....	.....	.....	.....	.....	.....	683.	790.	683.	683.	342.	395.

AMPERES PER HORSE POWER—DIRECT CURRENT

Following table shows number of amperes required per horse power when the percentage of efficiency of the motor is known:

Efficiency of Motor	75 Per Cent	80 Per Cent	85 Per Cent	90 Per Cent
At 110 Volts	9. Amp.	8.4 Amp.	7.9 Amp.	7.5 Amp.
At 200 Volts	4.5 Amp.	4.2 Amp.	3.95 Amp.	3.75 Amp.
At 500 Volts	1.98 Amp.	1.86 Amp.	1.75 Amp.	1.66 Amp.

I=Current in Amperes.
HP=Horse Power.
E=Voltage.
K=Efficiency of Motor.

$$I=\frac{HP\times 74600}{E\times K}$$

FULL-LOAD CURRENTS OF MOTORS

The following data are approximate full-load currents for motors of various types, for estimating purposes. They have been compiled from average values for representative motors of their respective classes. Variations of 10 per cent above or below the values given may be expected.

Not to be used for selection of overload relays

Overload relays or heaters for overload devices should be selected only on the basis of full-load motor current as given on motor nameplate.

Hp of Motor	Full-load Current—Amperes																			
	DIRECT-CURRENT MOTORS		ALTERNATING-CURRENT MOTORS																	
			Single-phase Type SCR Motors		* Three-phase															
					Induction Motors								Synchronous Motors							
					Squirrel-cage				Wound-rotor				1.0 Power-factor				0.8 Power-factor			
	115-volt	230-volt	110-volt	220-volt	220-volt	440-volt	550-volt	2200-volt	220-volt	440-volt	550-volt	2200-volt	220-volt	440-volt	550-volt	2200-volt	220-volt	440-volt	550-volt	2200-volt
⅙	2.0	1.0			0.90	0.45	0.36													
¼	2.6	1.3			1.16	.58	.48													
⅓	3.2	1.6			1.4	.70	.56													
½	4.6	2.3	8.0	4.0	1.9	.95	.76													
¾	6.4	3.2	10.6	5.3	2.6	1.3	1.04													
1	8.2	4.1	12.8	6.4	3.4	1.7	1.36	.....	5.4	2.7	2.2									
1 ½	12.4	6.2	17.6	8.8	5.0	2.5	2.0	.....	6.8	3.4	2.7									
2	16.2	8.1	22	11	6.2	3.1	2.5	.....	8.0	4.0	3.2									
3	24	12	31	15.5	9.0	4.5	3.6	.....	10.6	5.3	4.2									
5	40	20	48	24	14.4	7.2	5.7	.....	16	8.0	6.4									
7 ½	60	30	68	34	21	10.5	7.3	.....	23	11.5	9.2									
10	78	39	90	45	27	13.5	11	.....	29	14.5	10.5									
15	114	57	.....	.....	40	20	16	.....	42	21	17									
20	150	75	.....	.....	52	26	21	.....	54	27	23	.....	46	23	18.5	4.6	62	31	25	6.2
25	186	93	.....	.....	64	32	26	7.0	68	34	27	7.7	58	29	23	5.8	74	37	30	7.4
30	224	112	.....	.....	78	39	31	8.1	80	40	32	8.8	68	34	27	6.8	88	44	35	8.8
40	294	147	.....	.....	102	51	41	10.5	104	52	42	11	88	44	35	8.8	114	57	46	11.5
50	364	182	.....	.....	126	63	51	12.5	128	64	51	13.5	110	55	44	11	140	70	56	14
60	.....	218	.....	.....	152	76	61	15	154	77	61	15.5	130	65	52	13	168	84	67	17
75	.....	270	.....	.....	188	94	75	18.5	188	94	75	19	162	81	65	16	208	104	83	21
100	.....	355	.....	.....	250	125	100	24.5	250	125	100	25	216	108	86	22	280	140	112	28
125	.....	445	.....	.....	310	155	125	30	310	155	125	31	268	134	107	27	340	170	136	34
150	.....	530	.....	.....	370	185	145	36	370	185	145	37	320	160	128	32	410	205	164	41
175	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	370	185	148	37	470	235	188	47
200	.....	700	.....	.....	490	245	195	49	490	245	195	49	420	210	168	42	540	270	216	54
225	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	470	235	188	47	600	300	240	60
250	.....	.....	.....	.....	600	300	240	60	600	300	240	60	530	265	212	53	670	335	268	67
300	.....	.....	.....	.....	720	360	290	72	720	360	290	72	630	315	252	63	800	400	320	80
350	.....	.....	.....	.....	840	420	340	84	840	420	340	84	730	365	292	73	930	465	372	93
400	.....	.....	.....	.....	960	480	380	96	960	480	380	96	830	415	322	83	1060	530	425	106
450	.....	.....	.....	.....	1080	540	430	110	1080	540	430	110	940	470	376	94	1180	590	472	118
500	.....	.....	.....	.....	1200	600	480	120	1200	600	480	120	1040	520	415	104	1320	660	528	132
600	.....	.....	.....	.....	1420	710	570	140	1420	710	570	140	1240	620	495	124	1580	790	632	158
700	.....	.....	.....	.....	1660	830	660	165	1660	830	660	165	1450	725	580	145	1820	910	728	182
800	.....	.....	.....	.....	1900	950	760	185	1900	950	760	185	1650	825	660	165	2100	1050	840	210
900	.....	.....	.....	.....	2140	1070	850	205	2140	1070	850	205	1850	925	740	185	2340	1170	935	234
1000	.....	.....	.....	.....	2360	1180	940	225	2360	1180	940	225	2060	1030	825	206	2600	1300	1040	260

* The full-load line current of two-phase motors is 0.87 times the three-phase values.

NOTE: On two-phase three-wire motors, the current carried by the common conductor is 1.23 times the three-phase value.

WIRING DATA FOR MOTORS

SINGLE PHASE — 110 VOLT

H. P. of Motor	Full Load Amp.	Max. Amp. Rating Branch Cir. Fuses: Starting: Repulsion Induction or Split Phase	Max. Amp. Rating Branch Cir. Fuses: Running	Minimum Size Rubber Covered Wire Am. Gauge or Cir. Mils	Minimum Size Conduit Inches
1/6	3.34	15	6	14	1/2
1/4	4.8	15	8	14	1/2
1/2	7	25	10	14	1/2
3/4	9.4	30	15	14	1/2
1	11	35	15	14	1/2
1 1/2	15.2	50	20	12	1/2
2	20	60	25	10	3/4
3	28	90	35	8	3/4
4	37	125	50	6	1
5	46	150	60	4	1 1/4
7 1/2	68	225	90	2	1 1/4
10	86	300	110	0	1 1/2

SINGLE PHASE — 220 VOLT

H. P. of Motor	FULL LOAD AMP.	Max. Amp. Rating Branch Cir. Fuses: START-ING: Repulsion Induction or Split Phase	Max. Amp. Rating Branch Cir. Fuses: RUN-NING	Minimum Size R. C. Wire Am. Gauge or Cir. Mils	Minimum Size Conduit Inches
1/6	1.67	15	3	14	1/2
1/4	2.4	15	4	14	1/2
1/2	3.5	15	6	14	1/2
3/4	4.7	15	8	14	1/2
1	5.5	20	8	14	1/2
1 1/2	7.6	25	10	14	1/2
2	10	30	15	14	1/2
3	14	45	20	12	1/2
4	19	60	25	10	3/4
5	23	80	30	8	3/4
7 1/2	34	110	45	6	1
10	43	125	60	5	1 1/4

THREE PHASE — 110 VOLT

H. P. of Motor	FULL LOAD AMP. Induction Type Wound Rotor or Squirrel Cage	Max. Amp. Rating Branch Cir. Fuses: STARTING: Wound Rotor	Max. Amp. Rating Branch Cir. Fuses: STARTING: Squirrel Cage Full Voltage	Max. Amp. Rating Branch Cir. Fuses: RUN-NING	Minimum Size R. C. Wire Am. Gauge or Cir. Mils	Minimum Size Conduit Inches
1/4	2.4	15	15	3	14	1/2
1/2	5	15	15	8	14	1/2
3/4	5.4	15	15	8	14	1/2
1	6.6	15	20	8	14	1/2
1 1/2	9.4	15	30	12	14	1/2
2	12.0	20	40	15	14	1/2
3	18	30	60	25	10	3/4
4	24	40	80	30	8	3/4
5	30	45	90	40	6	1 1/4
7 1/2	44	70	125	60	5	1 1/4
10	58	90	175	70	3	1 1/4
15	82	125	250	110	0	2
20	110	175	350	150	00	2
25	136	225	450	175	000	2
30	160	250	500	200	200,000	2 1/2
35	188	300	600	250	250,000	2 1/2
40	212	350	...	250	300,000	3
50	264	400	...	325	400,000	3
60	316	500	...	400	500,000	3
75	392	600	...	500	700,000	3 1/2

THREE PHASE — 220 VOLT

H. P. of Motor	FULL LOAD AMP. Induction Type Wound Rotor or Squirrel Cage	Max. Amp. Rating Branch Cir. Fuses: STARTING: Wound Rotor	Max. Amp. Rating Branch Cir. Fuses: STARTING: Squirrel Cage Full Voltage	Max. Amp. Rating Branch Cir. Fuses: RUN-NING	Minimum Size R. C. Wire Am. Gauge or Cir. Mils	Minimum Size Conduit Inches
1/4	1.2	15	15	2	14	1/2
1/2	2.5	15	15	3	14	1/2
3/4	2.8	15	15	4	14	1/2
1	3.3	15	15	4	14	1/2
1 1/2	4.7	15	15	8	14	1/2
2	6.0	15	20	8	14	1/2
3	9	15	30	12	14	1/2
4	12	20	40	15	14	1/2
5	15	25	45	20	12	1/2
7 1/2	22	35	70	30	8	3/4
10	27	40	80	35	8	3/4
15	38	60	125	50	6	1 1/4
20	52	80	175	70	4	1 1/4
25	64	100	200	80	3	1 1/4
30	77	125	250	100	1	1 1/2
35	91	150	300	110	0	2
40	101	150	300	125	00	2
50	125	200	400	175	000	2
60	149	225	450	200	200,000	2 1/2
75	180	300	600	225	0000	2 1/2
100	246	400	...	300	400,000	3
125	310	450	...	400	500,000	3
150	360	600	...	450	600,000	3 1/2
175	425	...	...	600	800,000	4
200	480	...	...	600	900,000	4

THREE PHASE — 440 VOLT

H. P. of Motor	FULL LOAD AMP. Induction Type Wound Rotor or Squirrel Cage	Max. Amp. Rating Branch Cir. Fuses: STARTING: Wound Rotor	Max. Amp. Rating Branch Cir. Fuses: STARTING: Squirrel Cage Full Voltage	Max. Amp. Rating Branch Cir. Fuses: RUN-NING	Minimum Size R. C. Wire Am. Gauge or Cir. Mils	Minimum Size Conduit Inches
1/4	0.6	15	15	1	14	1/2
1/2	1.3	15	15	3	14	1/2
3/4	1.4	15	15	3	14	1/2
1	1.7	15	15	3	14	1/2
1 1/2	2.4	15	15	4	14	1/2
2	3.0	15	15	4	14	1/2
3	4.5	15	15	8	14	1/2
4	6	15	20	8	14	1/2
5	7.5	15	25	10	14	1/2
7 1/2	11	20	35	15	14	1/2
10	14	25	45	20	12	1/2
15	19	30	60	25	10	3/4
20	26	40	80	35	8	3/4
25	32	50	100	40	6	1 1/4
30	39	60	125	50	6	1 1/4
35	46.5	70	150	60	4	1 1/4
40	51	80	175	70	4	1 1/4
50	63	100	200	80	3	1 1/4
60	75	125	250	100	1	1 1/2
75	90	150	300	110	0	2
100	123	200	400	175	000	2
125	155	250	500	200	200,000	2 1/2
150	180	300	600	225	0000	2 1/2
175	212	350	...	250	300,000	3
200	240	400	...	300	350,000	3

THREE PHASE — 550 VOLT

H. P. of Motor	FULL LOAD AMP. Induction Type Wound Rotor or Squirrel Cage	Max. Amp. Rating Branch Cir. Fuses: STARTING: Wound Rotor	Max. Amp. Rating Branch Cir. Fuses: STARTING: Squirrel Cage Full Voltage	Max. Amp. Rating Branch Cir. Fuses: RUN-NING	Minimum Size R. C. Wire Am. Gauge or Cir. Mils	Minimum Size Conduit Inches
1/4	0.5	15	15	1	14	1/2
1/2	1.0	15	15	2	14	1/2
3/4	1.1	15	15	2	14	1/2
1	1.3	15	15	3	14	1/2
1 1/2	2.0	15	15	3	14	1/2
2	2.4	15	15	4	14	1/2
3	4.0	15	15	6	14	1/2
4	4.8	15	15	8	14	1/2
5	6	15	20	8	14	1/2
7 1/2	9.0	15	30	12	14	1/2
10	11	20	35	15	14	1/2
15	15	25	45	20	12	1/2
20	21	35	70	30	8	3/4
25	26	40	80	35	8	3/4
30	31	50	100	40	6	1 1/4
35	37	60	125	50	6	1 1/4
40	40	60	125	50	6	1 1/4
50	50	80	150	60	4	1 1/4
60	60	90	200	80	3	1 1/4
75	72	110	225	90	2	1 1/2
100	98	150	300	125	0	2
125	124	200	400	175	000	2
150	144	225	450	200	200,000	2 1/2
175	170	300	600	225	0000	2 1/2
200	195	300	600	250	250,000	2 1/2

USEFUL INFORMATION

HOW TO USE MOTOR TABLES

On Two Pages Following

The tables shown on two following pages are compiled on a basis of 1 volt loss for convenience in using the table on other percentages of loss. It is usual to allow a loss of more than 1 volt for motor service. In such case, divide the distance by the loss allowed, which will give the number of feet in which a loss of 1 volt will occur. Find this number of feet on the table at the horse power and voltage required and you will have necessary size of wire.

Example—A 5 horse power 220-volt motor, 400 feet from service, at 8 volts loss.

Explanation—A loss of 8 volts for 400 feet would be equal to a loss of 1 volt for 50 feet (400 divided by 8 equals 50). By referring to table we find that to carry a 5 horse power, 220-volt motor, 50 feet with a volt loss, a 6 B. & S. wire is required, which means that the same wire would be required to do the work called for by the example.

Always take the nearest number above rather than below in the table to the number of feet actually required. Do not use a smaller wire than given in following table.

MINIMUM SIZE WIRE FOR MOTOR SERVICE

Horse Power	Size of Wire, B. & S. 110 Volts	220 Volts	500 Volts	Horse Power	Size of Wire, B. & S. 110 Volts	220 Volts	500 Volts
½	14	14	14	10	2	5	10
1	14	14	14	15	00	3	8
2	10	14	14	20	000	2	6
3	8	12	14	25	0000	1	5
4	6	10	14	30	.....	00	4
5	5	8	14	40	.....	000	2
7½	3	6	12	50	.....	0000	1

AMPERES PER MOTOR

Horse Power	Per Cent of Efficiency	Watts	Operating Voltage 50	75	110	220	400	500	600	800	1000	1200
½	75	497	10.	6.62	4.5	2.25	1.24	1.	.83	.62	.497	.41
¾	75	746	14.9	9.94	6.78	3.38	1.86	1.48	1.24	.93	.746	.62
1	75	995	20.	13.24	9.	4.5	2.5	2.	1.66	1.24	1.	.82
1½	80	1492	29.8	19.8	13.56	6.78	3.73	2.98	2.48	1.86	1.492	1.24
2	80	1865	37.3	24.9	16.9	8.5	4.7	3.8	3.1	2.33	1.9	1.6
3	80	2797	55.9	37.2	25.4	12.7	6.99	5.59	4.66	3.49	2.797	2.33
4	80	3730	74.6	49.8	33.8	16.9	9.3	7.5	6.2	4.66	3.8	3.1
5	80	4662	93.2	62.1	42.3	21.1	11.65	9.32	7.77	5.82	4.662	3.88
7½	90	6217	124.	82.9	56.5	82.2	15.34	12.43	10.36	7.77	6.217	5.18
10	90	8288	165.	110.	75.3	37.6	20.72	16.57	13.81	10.36	8.288	6.9
15	90	12433	248.	165.	113.	56.5	31.08	24.86	20.72	15.54	12.43	10.36
20	90	16578	331.	221.	150.	75.3	41.44	33.15	27.63	20.72	16.57	13.98
25	90	20722	414.	276.	188.	94.1	51.8	41.6	34.5	25.9	20.7	17.2
30	90	24866	497.	331.	226.	113.	62.	49.7	41.4	31.	24.8	20.7
40	90	33155	663.	442.	301.	150.	82.8	66.3	55.2	41.4	33.1	27.6
50	90	41444	828.	552.	376.	188.	103.	82.8	69.	51.8	41.4	34.5
60	90	49733	994.	663.	452.	226.	124.	99.4	82.8	60.	49.7	41.4
70	90	58022	1160.	773.	527.	263.	145.	116.	96.7	72.5	58.	48.3
80	90	66311	1326.	884.	602.	301.	165.	132.	110.	82.9	66.3	55.2
90	90	74599	1491.	994.	678.	339.	186.	149.	124.	93.	74.5	62.
100	90	82888	1657.	1105.	753.	376.	207.	165.	138.	103.	82.8	69.
120	90	99459	1989.	1326.	904.	452.	248.	198.	165.	124.	99.	82.8
150	90	24312	2486.	1657.	1131.	565.	310.	248.	207.	155.	124.	103.

AMPERES PER HORSE POWER IN D. C. MOTORS

Voltage	Efficiency of Motor 75 Per Cent	80 Per Cent	85 Per Cent	90 Per Cent
110	9.	8.4	7.9	7.5
220	4.5	4.2	3.95	3.75
500	1.98	1.86	1.75	1.66

USEFUL INFORMATION

WIRING TABLES

Two Per Cent Loss on 50 Volts

Capacity Amperes	Distance in Feet to Center of Distribution																	
	20	25	30	35	40	45	50	60	70	80	90	100	120	140	160	180	200	250
1	....	....	....	....	....	....	....	....	....	....	....	16	16	15	14	14	13	12
1.5	....	....	....	....	....	....	....	....	....	16	15	15	14	13	13	12	12	11
2	....	....	....	....	....	....	16	16	15	14	14	13	13	12	11	11	10	9
3	....	....	....	16	16	15	15	14	13	13	12	12	11	10	10	9	9	8
4	....	16	15	15	14	14	13	13	12	11	11	10	10	9	8	8	7	6
5	16	16	15	14	13	13	12	12	11	10	10	9	9	8	7	7	6	5
6	16	15	14	13	13	12	12	11	10	10	9	9	8	7	7	6	6	5
7	15	14	13	12	12	11	11	10	10	9	8	8	7	7	6	5	5	4
8	14	13	13	12	11	11	10	10	9	8	8	7	7	6	5	5	4	3
9	14	13	12	11	11	10	10	9	8	8	7	7	6	5	5	4	4	3
0	13	12	12	11	10	10	9	9	8	7	7	6	6	5	4	4	3	2
2	13	12	11	10	10	9	9	8	7	7	6	6	5	4	4	3	3	2
4	12	11	10	10	9	8	8	7	7	6	5	5	4	4	3	2	2	1
6	11	10	10	9	8	8	7	7	6	5	5	4	4	3	2	2	1	0
8	11	10	9	8	8	7	7	6	5	5	4	4	3	2	2	1	1	0
0	10	9	9	8	7	7	6	6	5	4	4	3	3	2	1	1	0	00
5	9	8	8	7	6	6	5	5	4	3	3	2	2	1	0	0	00	00
0	9	8	7	6	6	5	5	4	3	3	2	2	1	0	0	00	00	000
5	8	7	6	6	5	4	4	3	2	2	1	1	0	0	00	00	000	000
0	7	6	6	5	4	4	3	3	2	1	1	0	0	00	000	000	0000	0000
5	7	6	5	4	4	3	3	2	1	1	0	0	00	00	000	0000	0000	.....
0	6	5	5	4	3	3	2	2	1	0	0	00	00	000	0000	0000	.....	.....
5	6	5	4	4	3	3	2	1	0	0	00	00	000	000	0000	.....	.....	.....
0	6	5	4	3	3	2	2	1	0	0	00	00	000	0000	.....	.....	.....	.....
5	5	4	4	3	2	2	1	1	0	00	00	000	000	0000	.....	.....	.....	.....
0	5	4	3	2	2	1	1	0	0	00	00	000	0000	.....	.....	.....	.....	.....
5	5	4	3	2	2	1	1	0	00	00	000	000	0000	.....	.....	.....	.....	.....
0	4	3	3	2	1	1	0	0	00	000	000	0000	0000	.....	.....	.....	.....	.....
0	4	3	2	1	1	0	0	00	00	000	0000	0000	.....	.....	.....	.....	.....	.....
0	3	2	2	1	0	0	00	00	000	000	0000	.....	.....	.....	.....	.....	.....	.....

Two Per Cent Loss on 110 Volts

Capacity Amperes	Distance in Feet to Center of Distribution																	
	20	30	40	50	60	70	80	90	100	120	140	160	180	200	240	280	320	360	400
1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	16	15	15	14	14
1.5	....	....	....	....	....	....	....	....	....	....	....	16	15	15	14	14	13	12	12
2	....	....	....	....	....	....	....	....	....	16	15	15	14	14	13	12	12	11	11
3	....	....	....	....	....	....	16	15	15	14	14	13	12	12	11	11	10	9	9
4	....	....	....	....	16	15	15	14	14	13	12	12	11	11	10	9	9	8	8
5	....	....	....	16	15	14	14	13	13	12	11	11	10	10	9	8	8	7	7
6	....	....	16	15	14	14	13	12	12	11	11	10	9	9	8	8	7	7	6
7	....	16	15	14	14	13	12	12	11	11	10	9	9	8	7	7	6	6	5
8	....	16	15	14	13	12	12	11	11	10	9	9	8	8	7	7	6	5	5
9	....	15	14	13	12	12	11	11	10	9	9	8	8	7	7	6	5	5	4
0	16	15	14	13	12	11	11	10	10	9	8	8	7	7	6	5	5	4	4
2	16	14	13	12	11	11	10	9	9	8	8	7	7	6	5	5	4	4	3
4	15	14	12	11	11	10	9	9	8	7	7	6	6	5	5	4	3	3	2
6	15	13	12	11	10	9	9	8	8	7	7	6	5	5	4	3	3	2	2
8	14	12	11	10	9	9	8	8	7	7	6	5	5	4	4	3	2	2	1
0	14	12	11	10	9	8	8	7	7	6	5	5	4	4	3	2	2	1	1
5	13	11	10	9	8	7	7	6	6	5	4	4	3	3	2	1	1	0	0
0	12	10	9	8	7	7	6	6	5	4	4	3	3	2	1	1	0	0	00
5	11	10	8	7	7	6	5	5	4	4	3	2	2	1	1	0	00	00	000
0	11	9	8	7	6	5	5	4	4	3	2	2	1	1	0	00	00	000	000
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0	10	8	7	6	5	4	4	3	3	2	1	1	0	0	00	000	000	0000	0000
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0	8	7	5	4	4	3	2	2	1	1	0	00	00	000	000	0000	0000	.....	.....
0	8	6	5	4	3	2	2	1	1	0	00	00	000	000	0000	0000	.....	.....	.....
0	7	6	4	3	3	2	1	1	0	00	00	000	000	0000	0000	.....	.....	.....	.....
0	7	5	4	3	2	1	1	0	0	00	000	000	0000	0000	.....	.....	.....	.....	.....
0	6	4	3	2	1	1	0	0	00	00	000	0000	0000	.....	.....	.....	.....	.....	.....

Wire sizes given are B. & S. gauge.

USEFUL INFORMATION

WIRING TABLES

2 Per Cent Loss, 220 Volts

Cap. Amps.	Distance in Feet to Center of Distribution																		
	20	30	40	50	60	70	80	90	100	120	140	160	180	200	240	250	320	360	400
1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	16
1.5	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	16	15	15
2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	16	15	15	14	14
3	....	....	....	....	....	....	....	....	....	....	....	16	15	15	14	14	13	12	12
4	....	....	....	....	....	....	....	....	....	16	15	15	14	14	13	12	12	11	11
5	....	....	....	....	....	....	....	....	16	15	14	14	13	13	12	11	11	10	10
6	....	....	....	....	....	....	16	15	15	14	14	13	12	12	11	11	10	9	9
7	....	....	....	....	....	16	15	14	14	14	13	12	12	11	11	10	9	9	8
8	....	....	....	....	16	15	15	14	14	13	12	12	11	11	10	9	9	8	8
9	....	....	....	....	15	15	14	14	13	12	12	11	11	10	9	9	8	8	7
10	....	....	....	16	15	14	14	13	13	12	11	11	10	10	9	8	8	7	7
12	....	....	16	15	14	14	13	12	12	11	11	10	9	9	8	8	7	7	6
14	....	16	15	14	14	13	12	12	11	11	10	9	9	8	7	7	6	6	5
16	....	16	15	14	13	12	12	11	11	10	9	9	8	8	7	7	6	6	5
18	....	15	14	13	12	12	11	11	10	9	9	8	8	7	7	6	5	5	4
20	16	15	14	13	12	11	11	10	10	9	8	8	7	7	6	5	5	4	4
25	16	14	13	12	11	10	10	9	9	8	7	7	6	6	5	4	4	3	3
30	15	13	12	11	10	10	9	9	8	7	7	6	6	5	4	4	3	3	2
35	14	13	11	10	10	9	8	8	7	7	6	5	5	4	4	3	2	2	1
40	14	12	11	10	9	8	8	7	7	6	5	5	4	4	3	2	2	1	1
45	13	12	10	9	9	8	7	7	6	6	5	4	4	3	3	2	1	1	0
50	13	11	10	9	8	7	7	6	6	5	4	4	3	3	2	1	1	0	0
60	12	10	9	8	7	7	6	6	5	4	4	3	3	2	1	1	0	0	00
70	11	10	8	7	7	6	5	5	4	4	3	2	2	1	1	0	00	00	000
80	11	9	8	7	6	5	5	4	4	3	2	2	1	1	0	00	00	000	000
90	10	9	7	6	6	5	4	4	3	3	2	1	1	0	00	00	000	000	0000
100	10	8	7	6	5	4	4	3	3	2	1	1	0	0	00	000	000	0000	0000
120	9	7	6	5	4	4	3	3	2	1	1	0	0	00	000	000	0000	0000	.....

Wire sizes given are B. & S.

Minimum Sized Wire For Motor Services

When Concealed or Partly Concealed Wires are used

Horse Power	Size of Wire, B. & S.			Horse Power	Size of Wire, B. & S.		
	110 Volts	220 Volts	500 Volts		110 Volts	220 Volts	500 Volts
½	14	14	14	25	000	1	6
1	14	14	14	30	0000	0	5
2	12	14	14	40	.....	00	3
3	10	14	14	50	.....	000	2
4	8	12	14	60	.....	0000	1
5	6	10	14	70	.....	.....	0
7½	4	8	14	80	.....	.....	00
10	3	6	12	90	.....	.....	00
15	0	5	10	100	.....	.....	000
20	00	3	8	120	.....	.....	0000

Formula For Alternating Current Wiring

Get distance in feet; watts delivered; volts at delivery end; per cent loss desired. Select "T" from the following.

"T" equals 2,150 for direct current, 2,400 for single-phase for lights only, 3,000 for single-phase for motor and lights, 3,380 for single-phase for motor only, 1,200 for three-wire three-phase, and four-wire two-phase for lights only, or 1,500 for three-wire three-phase, and four-wire two-phase for lights and motors, or 1,690 for three-wire three-phase, and four-wire two-phase for motors only.

$$\text{Circular Mils, each wire} = \left\{ \frac{\text{Feet x watts x T}}{\text{per cent loss x volts x volts.}} \right.$$

$$\text{For D. C. use C. M.} = \left\{ \frac{\text{Amps. x distance x 2200}}{\text{per cent loss x volts.}} \text{ or } \frac{\text{Feet x watts x 2200}}{\text{per cent loss x volts x volts.}} \right.$$

GRAPHIC SYMBOLS FOR ELECTRIC POWER AND CONTROL

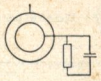
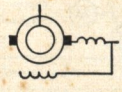
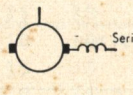
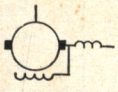
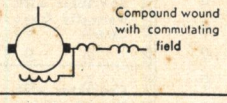
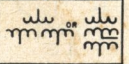
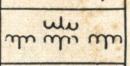
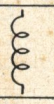
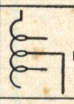
Apparatus	Basic Symbol	Attachments
Air Break Switch, Direct Manually Operated, Single Throw		Discharge Clip; Auxiliary Switches
Air Break Switch, Direct Manually Operated, Double Throw		Discharge Clip; Auxiliary Switches
Air Break Switch, Remote Operated, Single Throw		Horn Gap; Auxiliary Switches; Motor Operating Mechanism; Key Interlock (The lettered circles indicate the keys)
Air Break Switch, Remote Operated, Double Throw		Attachments same as for single throw
Air Break Switch, Remote Operated, Double Blade Selector Type		

Apparatus	Basic Symbol	Attachments
Air Break Switch, Remote Operated, Single Blade Selector Type		
Contactor with Normally Open Contact		
Contactor with Normally Closed Contact		

	Basic Symbol	Attachments
Air Circuit Breaker		Motor Operated; Mechanical Interlock; Under Voltage Device. (The letters "T.D." are used only if the device is time delay); Solenoid Operated; Removable Breaker Element; Shunt Trip (On manually operated only); Reverse Current trip arrow indicates direction of current flow to trip; Note: The absence of either of the above two symbols denotes manual operation.; Key Interlock (The lettered circles indicate the keys); Overcurrent trips The number indicates how many poles are so equipped. The letters "T.D." are used only if the trips are time delay; Thermal trips. The number indicates how many poles are so equipped
Power Circuit Breaker– Single Throw		Motor Operated; Solenoid Operated; Air Operated; Key Interlock. (The lettered circles indicate the keys); Potential or Shunt Trip (used on manually operated breakers only); Mechanical Interlock; Current or Series Trip (the number indicates how many coils); Removable Breaker Element.; Undervoltage Device. (The letters "T.D." are used only if the device is time delay); Note The use of the above three symbols is optional and their absence indicates manual operation only when they are used on other breakers on the same diagram.
Power Circuit Breaker– Double Throw		
Fuses		Disconnecting Switch Mounting; Draw-out Carriage Mounting.

Courtesy, Anaconda Wire and Cable Company

GRAPHIC SYMBOLS FOR ELECTRIC POWER AND CONTROL

Apparatus	Basic Symbol	Variations
Squirrel-cage Induction Motors and Generators		 Wye connected with both ends of each phase brought out;  2 circuit stator winding;  With resistor temperature detectors, the number indicating number of detectors
Wound-rotor Induction Motors and Generators		 Wye connected with both ends of each phase brought out;  With magnetic secondary control;  With liquid slip regulator
Synchronous Generators, Motors, and Condensers		Same as squirrel-cage induction machines
Synchronous Converters		 Shunt wound;  Compound wound
D-c Generators, Motors, and Exciters		 Shunt wound;  Series wound;  Compound wound;  Compound wound with commutating field;  Separately excited;  Amplidyne generator
Power rectifiers		
Fixed Ratio Power Transformers: 2 Winding		 Winding neutral brought out;  Winding temperature device with resistor temperature detector; Connection symbols to be placed alongside windings.
3 Winding		
4 Winding		 Tapped windings;  Winding temperature device with vapor pressure thermometer; Y - Wye
With tertiary not brought out		Δ - Delta
Autotransformer		 Ratio adjuster;  Both ends of each phase winding brought out; ⊢ Tee; ⅄ - Zig-Zag; ✱ - Diametric
Constant-current Transformer		
Induction Regulator		
Nonmagnetic Core Reactors		 Designated Taps;  Adjustable
Magnetic Core Reactors		 Designated Taps;  Adjustable
Resistors		 Designated Taps;  Adjustable
Static Capacitors		

Abstracted from American Standard (ASA) 32.3–1946, sponsored by AIEE and ASME.

Courtesy, Anaconda Wire and Cable Company

SECTION 5

SIGNALLING DEVICES • FANS • HEATING

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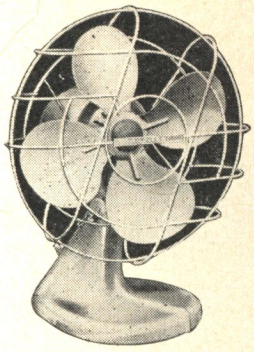
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HUNTER OSCILLATING FANS



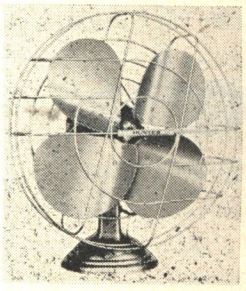
10" AND 12" STANDARD FANS

The Standard Fan incorporates many of the outstanding features of luxury models. Rugged, shaded-pole motors are single-speed on 10", two-speed on 12". Totally enclosed oscillating mechanism is adjustable for stationary or oscillating service. Beige finish. Shipping weight 10" model, 8 lbs; 12" model, 10 lbs. C.F.M. rating of 10" model, 670; 12" model, 820. Guaranteed 1 year.

No. 36004A, 10" Standard $19.95
No. 37004A, 12" Standard 29.95

Operate on 115 Volt, 60 cycle, A. C.

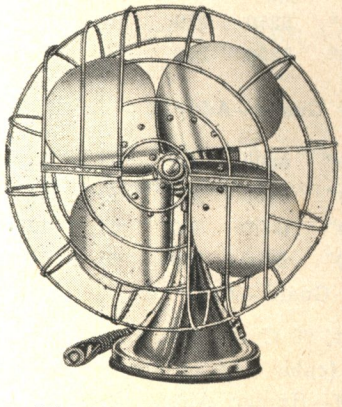
16" STANDARD OSCILLATING FANS



Powerful, dependable motor and wide, scientifically designed blades deliver 1500 cu. ft. of air per minute. The 3 speed, shaded-pole motor will provide years of trouble-free service. Totally-enclosed oscillating mechanism. Attractive beige finish with sturdy bright-finish guard. Adaptable for wall mounting. The quality leader of the economy fan field. Shipping weight 27 lbs. Guaranteed 5 years.

No. L1654, 115 Volt, 60 cycle, A.C. $46.95

12" AND 16" ZEPHAIR OSCILLATING FANS



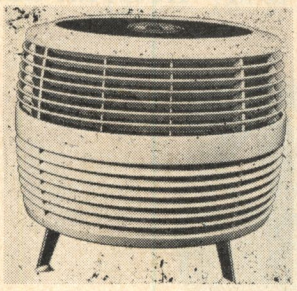
Typical of Hunter quality, Zephair oscillating fans are designed for home or office use. Equipped with wide, polished aluminum blades and a totally enclosed 3-speed motor, they are easily adjusted for wall mounting. The motor housing and base are finished in black satin lacquer. Shipping weight 12-inch model, 21 lbs.; 16-inch model, 23 lbs. C.F.M. rating 12" model, 1150; 16" model, 1700. Underwriters' approved. Guaranteed 5 years.

No. C1255, 12" Zephair Oscillator $46.95
No. 265, 16" Zephair, Oscillator 56.95

115 Volt, 60 Cycle, A.C.

ALL PRICES INCLUDE FEDERAL TAX

HUNTER HASSOCK FAN



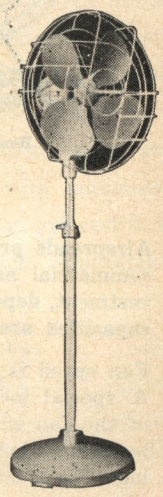
360° CIRCULATION

The new Hunter Floor Fan combines efficient operation, smart styling and sturdy modern design. Utilizing a new cooling principle, this popular fan lifts cooler floor-level air upward and outward, directing air currents into room corners. 3-speed rubber-mounted motor. Doubles as a seat or low table. 3500 C.F.M. rating. Shipping weight 29 pounds. Guaranteed 5 years.

No. F1255, 115 Volt, 60 cycle, A.C. $54.95

HUNTER PEDESTAL FAN

16-Inch Oscillating



Particularly suitable for homes, offices, salesrooms and stores, where appearance, large breeze capacity, quiet operation and economical, dependable service are important. Modern streamlined styling of the motor body, column and base. Color-harmonizing beige finish makes them equally appropriate in hotels, theaters or restaurants.

The distinctive appearance of this quality fan is surpassed only by its ability to provide enormous quantities of cool, refreshing air. Essentially the same in appearance and performance as 16" Standard, the Hunter Pedestal Fan is outstanding for its overall efficiency. Four big, wide blades, developed and perfected by exhaustive scientific tests, have been engineered to attain the greatest advantage from the powerful, shaded pole motor.

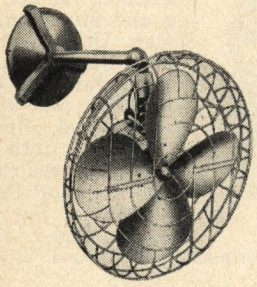
A sturdily constructed, bright finish guard provides the utmost in personal safety without unnecessary sacrifice of air delivery.

Adjustable in height from 38 to 62 inches, the Pedestal Fan is mounted on an attractive, telescoping column. Located on the column, a convenient, four-position switch controls the three motor speeds. Vertical elevation of air delivery is controlled by a friction hinge. A patented safety mechanism locks the fan in the desired position. An improved oscillating mechanism, enclosed in the motor body and sealed against oil leakage, provides slow, even oscillation. Guaranteed for 5 years.

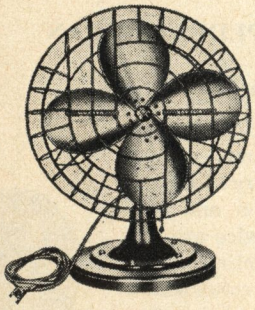
115 Volts, 60 cycles, A.C. Shipping weight, 35 lbs.

No. P-L1654, Pedestal Fan $65.95

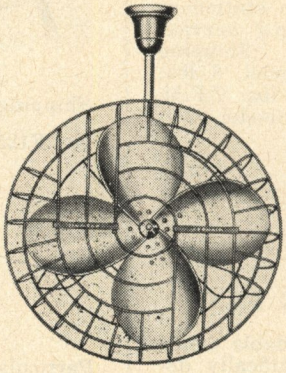
R & M—HUNTER ELECTRIC AIRSPREAD FANS



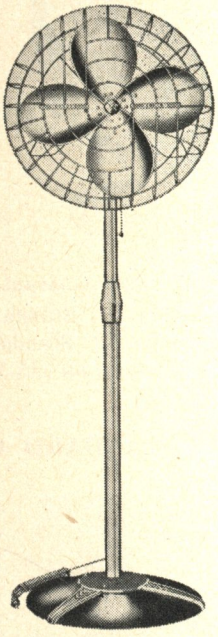
Wall Model



Bench Model



Ceiling Model



24″ Floor Model

30″ model has narrow blades. Other features and design are similar to 24″ model.

Airspreads provide effective, economical cooling for commercial and industrial use where minimum investment, dependable operation and large circulating capacities are required.

Fan speed is conveniently regulated by pull-switch. A special locking device permits easy adjustment of the fan so that the high velocity airstream can be directed wherever desired for most effective cooling. Floor model is complete with 15 foot cord and plug.

Ceiling, Bench and Wall Model Airspreads are exactly the same in construction and performance as the Floor Model Airspreads, except for method of mounting.

On high speed this circulator gives a tremendous circulation of high-velocity cool air that will refresh larger interiors in the most stifling weather. On second speed they operate so quietly that they are scarcely noticed except for the pleasing circulation of fresh, cool air.

R & M—Hunter Airspreads are ideally suited to home service. Not only are they used most effectively in large living rooms (on second speed) and on summer porches, but are equally adaptable for cooling bedrooms at night. Guaranteed 5 years.

C.F.M. ratings: 24″ models, 5250; 30″ models, 6600.

Non-Oscillating 24″ and 30″ Air Spread Fans

Cat. No.	Type	Blade Size	C.F.M. High Speed	Watts	Shipping Wgt. Lbs.	Retail Price
2452P	Pedestal	24″	5250	250	97	$133.00
2452C	Ceiling	24″	5250	250	44	108.50
2452B	Bench	24″	5250	250	61	115.25
2452W	Wall	24″	5250	250	59	115.25
(With Super Safety Guard—Add)						10.00
G3052P	Pedestal	30″	6600	300	103	139.00
G3052C	Ceiling	30″	6600	300	50	114.50
G3052B	Bench	30″	6600	300	68	121.25
G3052W	Wall	30″	6600	300	65	121.25
(With Super Safety Guard—Add)						12.50

Operate on 115 Volt, 60 Cycle, A.C. circuit.

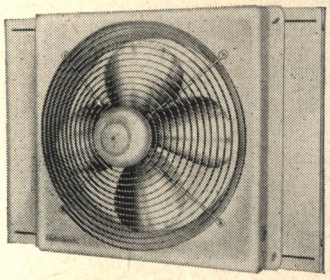
*All air deliveries (cubic feet of air per minute) given for R & M—Hunter Airspread Fans are measured in accordance with standards set by the National Electrical Manufacturers' Association.

ALL PRICES INCLUDE FEDERAL EXCISE TAX

Bench, ceiling and wall models are packed in three cartons. Floor model is packed in four cartons.

HUNTER WINDOW FANS

18 AND 22-INCH ELECTRICALLY REVERSIBLE WINDOW FANS



Hunter's new, high-performance, portable 18″ and 22″ Window Fans provide ample air movement for the cooling and ventilating needs of small homes, apartments and offices. The electrically reversible, capacitor type motor changes direction of the air flow at a flick of the switch. High and Low speeds in both forward and reverse permit regulation to suit the owner's personal preference. 18-inch model is adjustable to windows up to 35 inches wide; 22-inch model is adjustable to windows up to 39 inches wide. Installed merely by hanging on four screws in window frame. Light ivory finish with silvered grille.

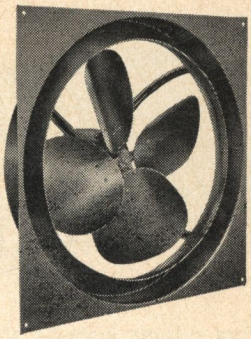
Cat. No.	Size	C.F.M.	Ship. Wgt.	Price
B-2500A	18″	2350	42 lbs.	$59.95
B-3400A	22″	3400	54 lbs.	79.95
†B-2500B	18″	2350	42 lbs.	64.95
†B3400B	22″	3400	54 lbs.	84.95

Operate on 115 Volt, 60 cycle, A.C.

†—With Thermostat—Finish Beige.

R & M HUNTER EXHAUST FANS

12″ — 16″ — 18″ MODELS



Designed for use wherever medium-duty commercial or industrial ventilation is required, these fans may be installed in either vertical or horizontal position. Much easier to install than the conventional circular types, these fans are mounted in a square panel. The cool-operating, two-speed, capacitor-type motor is mounted in rubber for quiet dependable performance and is totally enclosed against dust and moisture, thus assuring years of trouble-free service. All three models have ball bearing construction and may be readily equipped with automatic shutters if desired. Air delivery ratings are certified. Complete with two-speed toggle switch. Guaranteed 1 year.

Cat. No.	Size	C.F.M.	Ship. Wgt.	Price
E-1251	12″	1000	17 lbs.	$47.50
E1650	16″	1750	24 lbs.	57.00
E1850	18″	2225	31 lbs.	66.50

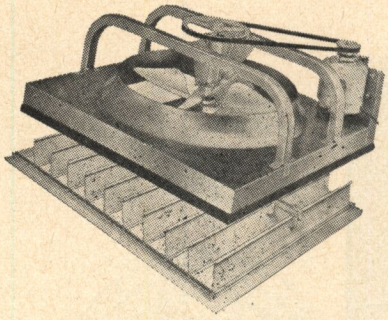
AUTOMATIC WALL SHUTTERS FOR EXHAUST FANS

These shutters make no significant change in fan performance. Constructed with mill-rolled steel frames and aluminum blades with felt seals. Bronze bearings eliminate vibration and allow free movement of the shutter blades. Designed to furnish protection against the weather, these units provide an effective closure, offer minimum resistance to air flow.

Shutter No.	For Fan No.	†Wall Opening Required	Price
ES 14	E 1251	14x14	$16.50
ES 18	E 1650	18x18	21.00
ES 20	E 1850	20x20	24.00

†Add 3″ for overall dimensions of shutter

R & M—HUNTER PACKAGE ATTIC FANS



BV2453, BV3053, BV3653 and AV4252
With Automatic Ceiling Shutter

FEATURES

1. New automatic shutter.
2. Fan unit mounted on rubber.
3. Thermal overload protection.
4. Built in fuse link.
5. Positive air seal on fan unit.
6. Certified air delivery ratings.
7. Underwriters' Laboratories approved.
8. Fan guaranteed 5 years; motor and shutter 1 year.

No other fan can be installed as quickly and cheaply. All necessary parts are shipped as two complete assemblies: the fan unit and the automatic shutter unit. After exhaust and ceiling openings have been prepared, the fan is merely set in place — no fastenings needed. The shutter fastens with screws to the ceiling opening frame, with the flange forming a ceiling trim.

Cat. No.*	Blade Size	C.F.M.** Zero	1/10"	R.P.M.	H.P.	Volts	Retail‡ Price
BV2453	24"	5000	3700	580	1/6	115	**$ 97.00**
BV3053	30"	7000	5000	465	1/4	115	**108.00**
BV3653	36"	10500	8000	375	1/3	115	**131.00**
AV4252	42"	16000	12000	355	1/2	115/230	**205.00**

*Catalog number covers fan complete with motor but without automatic ceiling shutter. (See ceiling shutter table.)

WEIGHTS AND DIMENSIONS

Cat. No.	Overall Dimensions Width	Length	Height	Exhaust Net Free Air Area	Shp. Wgt. Lbs.
BV2453	32"	36"	15"	6.0′	88
BV3053	35¼"	40¼"	15"	8.0′	104
BV3653	41¼"	50"	15"	13.4′	126
AV4252	52¼"	52¼"	21⅜"	18.8′	257

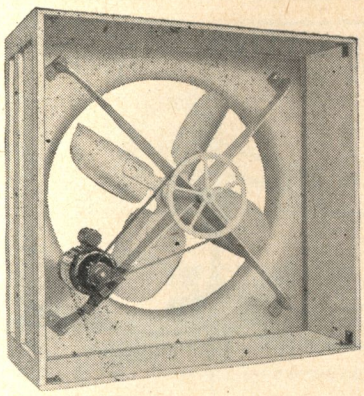
‡ Retail Price covers fan complete with motor but without Auto. Shutter.

AUTOMATIC SHUTTER

The new automatic ceiling shutter is operated by a combination of air pressure and spring tension. Blades open wide when fan is turned on and close tightly when the fan is off. Special "weatherstrip" construction of shutter blades eliminates drafts when shutter is closed. Built-in fuse link provides fire protection. Shutter and trim have off white finish of baked enamel to harmonize with all color schemes.

Cat. No.	For Fan Cat. No.	Dimensions Incl. Flange	Ceiling Opening Required	Shp. Wgt. Lbs.	Retail Price
CS47	**BV2453**	32" x 36½"	30½" x 34½"	20	**$41.00**
CS68	**BV3053**	35⅜" x 40⁸/₁₆"	33¾" x 38⅛"	24	**49.00**
CS114	**BV3653**	39¹⁵/₁₆" x 51³/₁₆"	38⅜" x 49⅛"	32	**60.00**
CS160	**AV4252**	51⁸/₁₆" x 54½"	49¼" x 52⅛"	43	**70.00**

R & M—HUNTER BELT DRIVEN EXHAUST FANS



MECHANICAL DETAILS FOR ALL SIZES

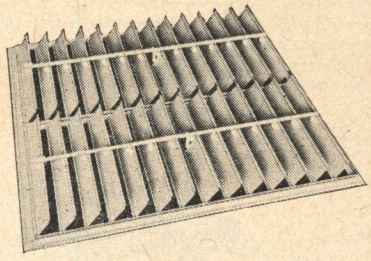
1. V-Belt drive insures long life, quiet operation.
2. Ball bearing motors insure many years of trouble-free service.
3. Thermal overload protection prevents burned out motors in case of low voltage or overload.
4. Heavy-gauge, die-formed steel blades give uniform air velocity over entire blade area.
5. One-piece streamlined orifice increases air delivery and reduces power consumption.
6. Cast iron blade hub carefully machined to fan shaft.
7. Entire blade assembly statically balanced to assure vibrationless performance.
8. Blade shaft mounted on ball bearings—absorb thrust load—permit operation in any position.
9. Mounting arms offer minimum resistance to air flow-absorb vibration.
10. All models Underwriters' approved.
11. Shipping crate designed for use in installation; may be removed, however, for special application.
12. Fan guarantee 5 years; motor 1 year.

SINGLE SPEED, 115 VOLTS, 60 CYCLES

Cat. No.	Size	C.F.M. Zero S.P.	H.P.	Overall Dimensions Fan Crate	Price
A-2454	24″	5,100	1/6	34x34x19½	$112.00
A-3054	30″	7.500	¼	42x42x21	130.00
A-3654	36″	11,400	⅓	48x48x21	169.00
14-FXB	42″	16,000	½	54x54x25¾	230.00
18-HXB	48″	20,000	½	60x60x25¾	270.00
18-HXB-3	48″	22,500	¾	60x60x25¾	290.00

R & M—HUNTER AUTOMATIC SHUTTERS
For Belt Driven Exhaust Fans

AUTOMATIC CEILING SHUTTERS



The frame of this all-steel shutter serves as ceiling trim. Adjustable spring mechanism counter-balances the blades so that shutter opens easily. A guard rail protects hinge rods from binding and covers edge of plaster. Steel shutter blades eliminate rattling when closed. Built-in fuse link provides fire protection.

CEILING SHUTTERS

Shutter Cat. No.	For Fan Cat. No.	Shutter Size Incl. Trim	Ceiling Opening Required	List Price
CS-47	A-2454	32 x36½	30½x34½	$41.00
CS-68	A-3054	35⅜x40$\frac{3}{16}$	33¾x38⅛	49.00
CS-114	A-3654	39$\frac{15}{16}$x51$\frac{3}{16}$	38⅜x49⅛	60.00
†CS-160	14-FXB	51$\frac{3}{16}$x54½	49¼x52⅞	70.00
†CS-200	18-HXB	62⅞x62$\frac{3}{16}$	60¼x60¼	80.00
†CS-225	18-HXB-3	62$\frac{3}{16}$x69⅛	60¼x67½	85.50

†Two shutters per set

AUTOMATIC WALL SHUTTER

Frames are made of mill-rolled steel angle, electric welded to prevent warping. Aluminum shutter blades offer minimum resistance to air stream. Felt seals are crimped (not cemented) into the blades to seal openings. Self-aligning bronze bearings eliminate hinge-rod vibration and maintain free movement of the louver blades.

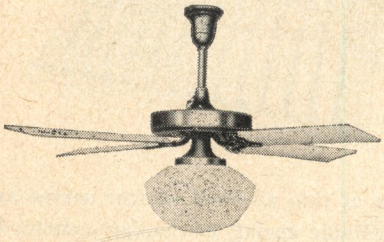
WALL SHUTTERS

Shutter Cat. No.	For Fan Cat. No.	†Shutter Size Daylight Opening	List Price
ES-26	A-2454	26″x26″	$30.00
ES-32	A-3054	32″x32″	43.50
ES-38	A-3654	38″x38″	51.50
ES-44	14-FXB	44″x44″	60.00
ES-50	{18-HXB / 18-HXB-3}	50″x50″	68.00

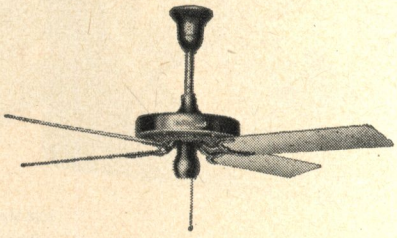
†Add 3″ For Overall Dimensions

R & M—HUNTER CEILING FANS

36″ AND 52″ STANDARD AND HOTEL TYPES



52-Inch Hotel Type
6-Inch Holder for Glassware
but Without Glassware



52-Inch Standard Type

Operating at very slow speeds, R & M—Hunter Ceiling Fans are ideal for quiet circulation of large volumes of air at low velocities. The induction type motor has thrust ball bearings that revolve in leak-proof reservoirs of oil that recirculates over the shaft. "Adaptair" is a patented device for changing angle of fan blades so that air movement may be directed down for normal use, or up if indirect air movement is desired. This adjustment is made merely by moving a small lever. Adaptair is available on Cat. No. 5254A and 5254HA. All models are handsomely finished in long-lasting black lacquer. Standard Types are Underwriters' approved. Fans operate on 115 Volt, 60 cycle, A.C. Guaranteed 5 years.

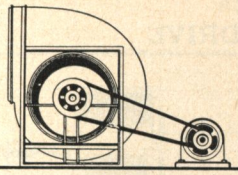
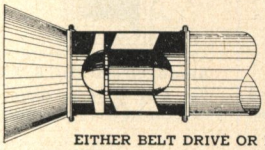
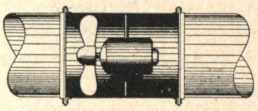
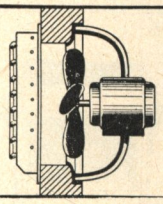
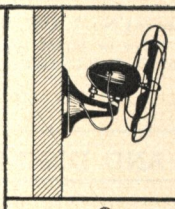
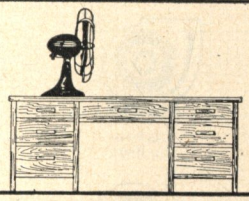
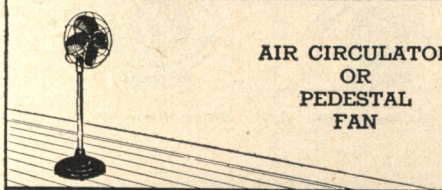
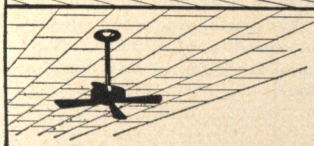
Cat. No.	Type	Blade Size	Speeds	C.F.M.	R.P.M.	Watts	Shipping Wgt. Lbs.	Retail Price
3654 Pull Switch for Fan	Standard	36″	2	4000	325	80	30	$ 74.00
*3654H Wall Switch for Fan and Light	Hotel	36″	1	4000	325	80	30	79.00
5254 Pull Switch for Fan	Standard	52″	3	7000	220	122	60	109.00
5254A Pull Switch for Fan	Adaptair	52″	3	7000	220	122	61	119.00
*5254HA Pull Switch for Fan Wall Switch for Light	Hotel with Adaptair	52″	3	7000	220	122	61	126.00
5247 Pull Switch for 3654H and 5254HA								1.00

*Note: Wall switches are not furnished with fan. Extra pull switches for controlling light and/or motor by pull chain may be ordered separately.

USEFUL INFORMATION

Classification of Air Moving Equipment

NATIONAL ASSOCIATION OF FAN MANUFACTURERS, INC.

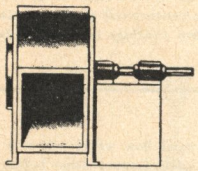
TYPES OF AIR MOVING EQUIPMENT	GROUP CLASSIFICATION	DESCRIPTION
VENTILATING AND INDUSTRIAL FANS — CENTRIFUGAL, AXIAL AND PROPELLER TYPES	 CENTRIFUGAL FAN — EITHER BELT DRIVE OR DIRECT CONNECTION	A Centrifugal Fan consists of a fan rotor or wheel within a scroll type of housing. The Centrifugal Fan is designed to move air or gases over a wide range of volumes and pressures. The fan wheel may be furnished with straight, forward curve, backward curve, or radial tip blades. The fan housing may be constructed of sheet metal or cast metals with or without protective coatings such as rubber, lead, enamel, etc.
	 VANEAXIAL FAN — EITHER BELT DRIVE OR DIRECT CONNECTION	A Vaneaxial Fan consists of an axial flow wheel within a cylinder combined with a set of air guide vanes located either before or after the wheel. The Vaneaxial Fan is designed to move air or gases over a wide range of volumes and pressures. It is generally constructed of sheet metal although cast metal fan wheels are sometimes furnished.
	 TUBEAXIAL FAN — EITHER BELT DRIVE OR DIRECT CONNECTION	A Tubeaxial Fan consists of an axial flow wheel within a cylinder. The Tubeaxial Fan is designed to move air or gas through a wide range of volumes at medium pressures. Its construction is similar to the Vaneaxial Fan.
	 PROPELLER FAN — EITHER BELT DRIVE OR DIRECT CONNECTION	A Propeller Fan consists of a propeller or disc wheel within a mounting ring or plate. The Propeller Fan is designed to move air from one enclosed space to another or from indoors to outdoors or visa versa in a wide range of volumes at low pressure. (The automatic type of shutter illustrated in cut opposite is not a part of the Propeller Fan but is an auxiliary device to protect the fan when not operating by keeping out wind, rain, snow and cold).
ELECTRIC FANS — BUZZ FANS AND AIR CIRCULATORS	 WALL OR BRACKET FAN	The Wall or Bracket Fan is generally used in offices and in commercial establishments to circulate the air within the room from a fixed position.
	 DESK FAN	The Desk Fan is generally used in offices and homes to circulate the air within the room in which it operates.
	 AIR CIRCULATOR OR PEDESTAL FAN	The Air Circulator or Pedestal Fan is generally used in commercial establishments and in homes to circulate the air within the room in which it operates.
	 CEILING FAN	The Ceiling Fan is generally limited to use in commercial establishments to circulate the air from a fixed position.

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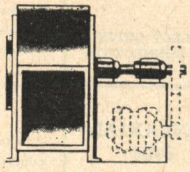
USEFUL INFORMATION

Ventilating Fan Drive Arrangements
Rotation and Discharge Designations
NATIONAL ASSOCIATION OF FAN MANUFACTURERS, INC.

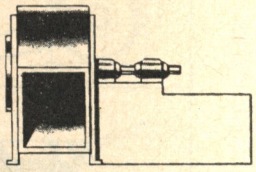
TABLE 1—ARRANGEMENTS OF DRIVE



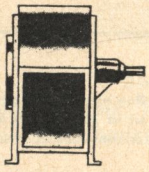
Arrangement No. 1, SW, SI
For belt drive or direct connection. Wheel overhung. Two bearings on base.



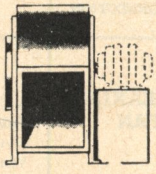
Arrangement No. 9, SW, SI
For belt drive. Arrangement No. 1 designed for mounting prime mover on side of base.



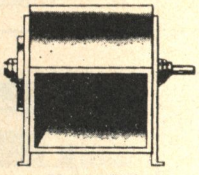
Arrangement No. 8, SW, SI
For belt drive or direct connection. Arrangement No. 1 plus base for prime mover.



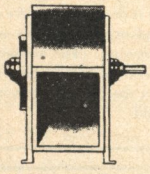
Arrangement No. 2, SW, SI
For belt drive or direct connection. Wheel overhung. Bearings in bracket supported by fan housing.



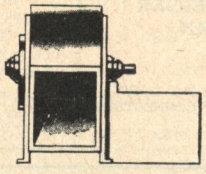
Arrangement No. 4, SW, SI
For direct drive. Wheel overhung on prime mover shaft. No bearings on fan. Base mounted or an integrally direct connected prime mover.



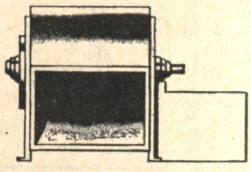
Arrangement No. 3, DW, DI
For belt drive or direct connection. One bearing on each side and supported by fan housing.



Arrangement No. 3, SW, SI
For belt drive or direct connection. One bearing on each side and supported by fan housing. Not recommended in sizes 27″ diameter wheel and smaller.



Arrangement No. 7, SW, SI
For belt drive or direct connection. Arrangement No. 3 plus base for prime mover. Not recommended in sizes 27″ diameter and smaller.



Arrangement No. 7, DW, DI
For belt drive or direct connection. Arrangement No. 3 plus base for prime mover.

TABLE 2—DESIGNATION OF DIRECTION OF ROTATION AND DISCHARGE



Counter-Clockwise Top Horizontal



Clockwise Top Horizontal



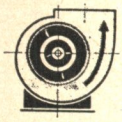
Clockwise Bottom Horizontal



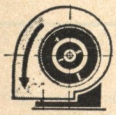
Counter-Clockwise Bottom Horizontal



Clockwise Up Blast



Counter-Clockwise Up Blast



Counter-Clockwise Down Blast



Clockwise Down Blast



Counter-Clockwise Top Angular Down



Clockwise Top Angular Down



Clockwise Bottom Angular Up



Counter-Clockwise Bottom Angular Up



Counter-Clockwise Top Angular Up



Clockwise Top Angular Up

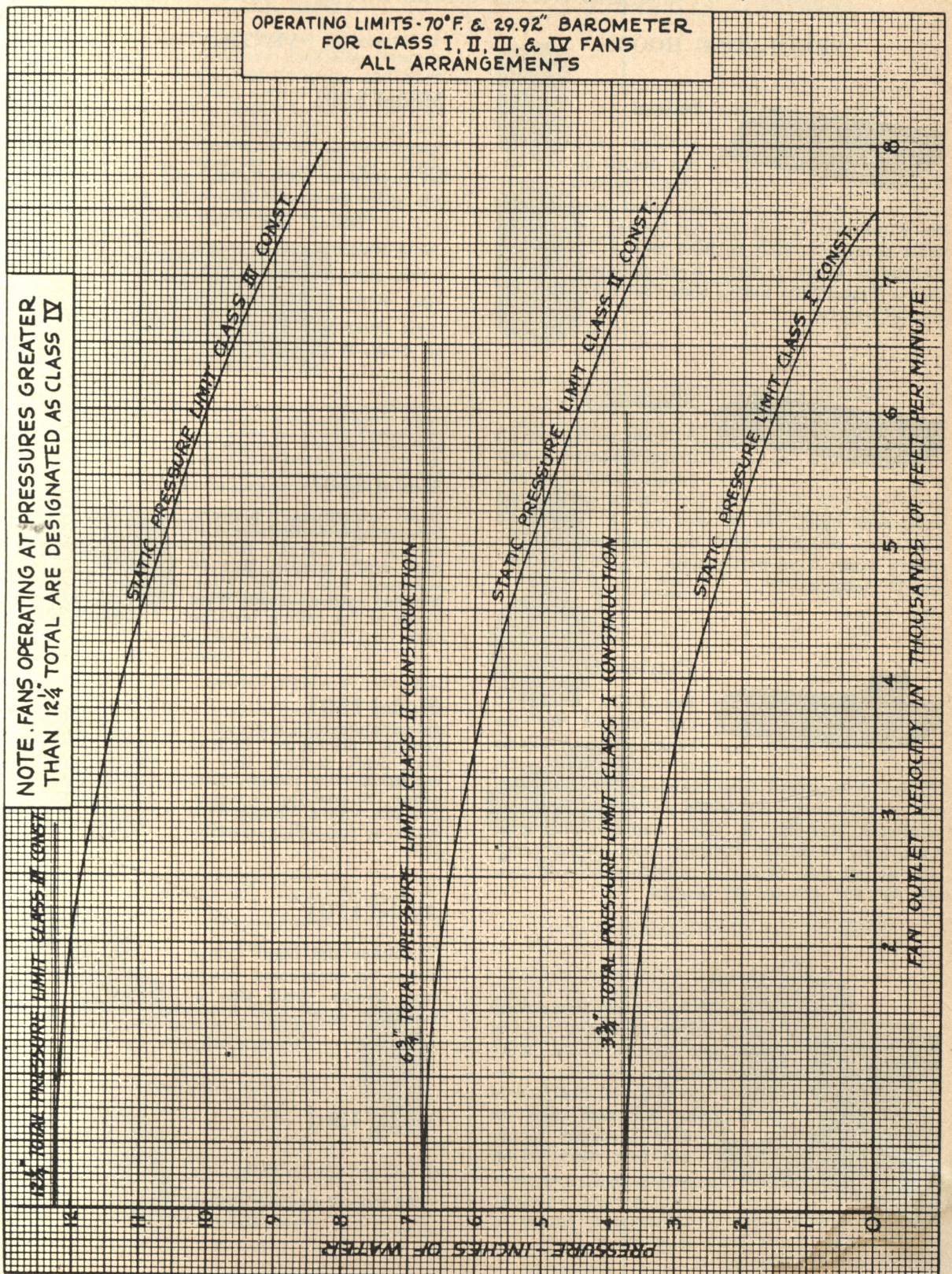
Direction of Rotation is determined from drive side for either single or double width, or single or double inlet fans. (The driving side of a single inlet fan is considered to be the side opposite the inlet regardless of actual location of the drive.) For fan inverted for ceiling suspension, Direction of Rotation and Discharge is determined when fan is resting on floor.

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USEFUL INFORMATION

Operating Limits for Fans

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TRADE-WIND CLIPPER VENTILATORS

EXHAUST VENTILATION FOR HOME KITCHEN, LAUNDRY, BATH, DEN AND OTHER SMALL ROOMS

VENTILATING HOODS



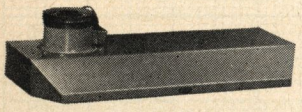
Salem

Striking early American design in rich antinque genuine copper to match latest ranges. Pre-Wired with Touch-Bar for 3-speed control and under-hood light. Can be used with 3 Trade-Wind Ventilators shown at right. Hood equipped with exclusive Trade-Wind baffle plate. 30″, 36″, 39″, 42″ and 48″ lengths.



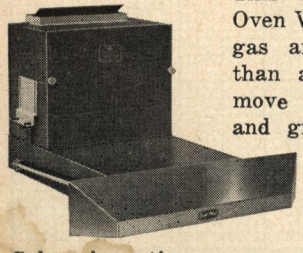
Stationary

Stunning modern design in stainless steel or rich genuine brushed copper. Pre-wired with Touch-Bar for 3-speed control and under-hood light. Can be used with 3 Trade-Wind Ventilators shown at right. Hood equipped with exclusive Trade-Wind baffle plate. 30″, 36″, 39″, 42″ and 48″ lengths.



Patrician

Beautifully designed and finished for the budget house. Available in coppertone, satin chrome or standard color finishes. This packaged unit is pre-wired with double switch for light and ventilator. Has built-in filter. Supplied only with Axial Flow Ventilator. Standard hood cut for Ventilator at left side. Center or right location available. 30″, 36″, 39″, 42″ and 48″ lengths.



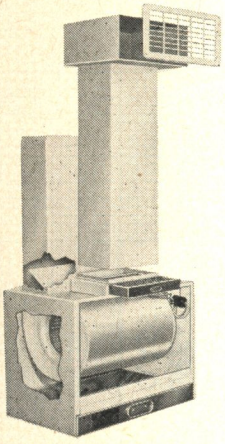
Oven

This is the new Trade-Wind Oven Ventilator for both built-in gas and electric ovens. More than adequate capacity to remove the blast of heat, odors and greasy air each time the door is opened. Equipped with filter, on/off switch and automatic thermostat control. Salem in antique copper — stationary in copper or stainless steel match Trade-Wind range hoods. 24″, 27″, 33″ and 45″ lengths.

VENTILATORS

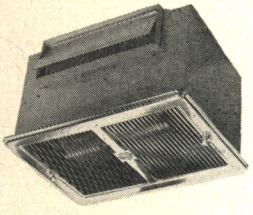
Model 3501

Recognized as the only complete system. Two inlets — one under the hood—the second at ceiling level. Both inlets equipped with washable filters. Powerful dual centrifugal blowers. Built-in back draft damper. For use with all Trade-Wind hoods.



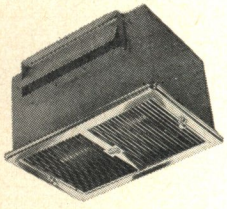
Model 2501

Dual centrifugal blowers. Interchangeable horizontal or vertical discharge. Built-in back draft damper. May be equipped with metal filter. For use with all Trade-Wind hoods or for ceiling installation.



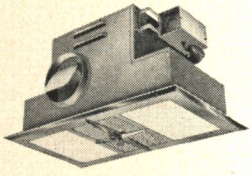
Model 1501

Interchangeable horizontal or vertical discharge. Built-in back draft damper. May be equipped with metal filter easily removed for cleansing. For use with all Trade-Wind hoods or for ceiling installation.



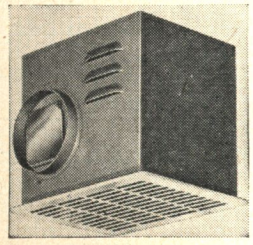
Model 1701

Ventilator and Light Combination for bathrooms, two 75 watt lamps. Duct size 4″ round, 50 watt motor.



Model 1201

Specially built for bathrooms. Duct size 4″ round, 50 watt motor.



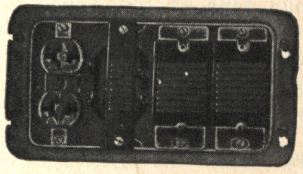
EDWARDS SIGNALING DEVICES

THE FLUSHCALL LINE



A modernized line of devices to replace old-fashioned doorbells, buzzers, combinations, transformers, and push buttons. Each device fits standard switch boxes, outlet boxes and fittings and takes standard toggle or receptacle plates. No-contact design, for A.C. only, assuring indefinite life with no adjustment ever needed. Can be ganged together with switches, receptacles, etc.

All devices have same appearance as above.



Covered with neat standard plate, above is new residence or apartment "one spot" method, instead of transformer in cellar, bells high on wall and convenience outlet low on wall. Transformer takes power from same line as receptacle. Because of depth of Powacall Transformer, this combination uses 2½-inch deep box. See description Powacall below. Twenty-four volts should be used where quantity of devices is to be operated in multiple at once.

THE RINGCALL®. Flush bell with better tone and more carrying power.

No. 660	8-10 V. A.C.	Standard Package 6	List	$2.09
No. 760	24 V. A.C.	Standard Package 3	List	2.59

THE BUZACALL®. Flush buzzer with better tone and more carrying power.

No. 661	8-10 V. A.C.	Standard Package 6	List	$2.04
No. 761	24 V. A.C.	Standard Package 3	List	2.48
No. 1063	110 V. A.C.	Standard Package 1	List	5.50

THE TUCALL®. Flush combination bell and buzzer.

No. 662	8-10 V. A.C.	Standard Package 6	List	$3.30
No. 762	24 V. A.C.	Standard Package 3	List	3.30

THE MELOCALL®. Soft single stroke for third signal, dining room-kitchen call, and similar uses.

No. 663	8-10 V. A.C.	Standard Package 3	List	$2.86
No. 763	24 V. A.C.	Standard Package 3	List	3.30

THE POWACALL®. Flush transformer. **Fits any standard 2½-inch deep box. Acts as barrier for either outlet or switch box. Underwriters' Approved.**

No. 666 10 V., 5 W. Secondary...List $4.13



No. 666



THE TOGELPUSH. Fits any standard box takes standard toggle plate.

No. 664 Standard Package 6.....List $ .57

DOORBELLS — BUZZERS



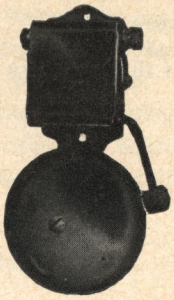


Streamlined Doorbells or Buzzers. Aluminized finish, as listed.

No.	Description	Std. Pkg.	Price Each
720	Fully Enclosed Dixie Doorbell	12	$1.35
730	Fully Enclosed Combination Bell and Buzzer. The Buzabel®	12	2.07
725	Fully Enclosed Dixie Buzzer	12	1.16

LUNGEN BELLS AND BUZZERS

Best quality. Chrome plated adjustable small bells and buzzers for office and residence use. Bug and dust proof. Silver contacts. Depth and volume of tone increases with size.



No. 13

13 LUNGEN BELLS

Size Inches	Standard 8-10 V. A.C. 6-8 V. D.C.	24 V. D.C., or 60 Cyc.	Other Voltages to 48 V.
1	$4.51	$5.06	$8.03
1¾	4.18	4.73	7.70
3	4.51	5.06	8.03



No. 15 Signaling

15 LUNGEN BUZZERS

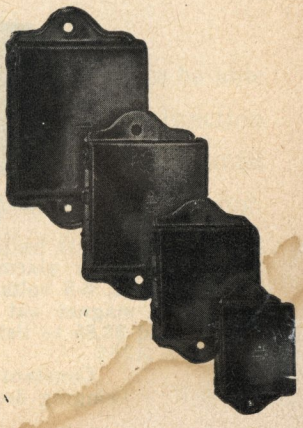
0—1⅝ x 1½	$3.63	$4.29	$6.93
1—2⅛ x 1⅞	3.41	3.96	6.60
2—2⅝ x 2⅛	3.63	4.29	6.93
3—3 x 2½	3.85	4.40	7.37

†4-inch is for D.C. only.

NO. 115 NO-CONTACT A.C. BUZZERS

Completely insulated. Convenient for metal desks, etc. Completely covered. Internal binding posts. Standard finish, polished chrome.

	Size In.	Price 8-12 W.	Price 24 V.
1	(2⅛x1 5/16)	$3.19	$3.41
2	(2⅝x1¾)	3.41	3.63
4	(3½x2¼)	4.95	5.23



Special voltages up to 48; specify exact voltage.

1	(2⅛x1 5/16)	$5.72	....
2	(2⅝x1¾)	6.05	....
4	(3½x2¼)	7.70	....

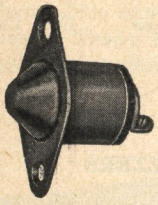
EDWARDS SIGNALING DEVICES

CONTACT DEVICES

All purpose to make or open contact on doors, windows, transoms, safes, burglar alarm systems, as foot push, automatic machinery, etc., operates from pressure in any direction. Insulated, made of brass, fits ¾" hole (1⅝" by 15/16" including flange). For low voltage.

Cat. No. 44 depressing opens contacts.
Cat. No. 45 depressing closes contacts.
Cat. No. 46 depressing makes, then breaks and repeats on return.

EDWARDS ALL-PURPOSE CONTACTORS



Designed so pressure from any direction will depress the nosing. The contactor fits a ¾" hole. Ideal for use on doors, windows, drawers, etc. Vulcoid insulation, phosphor bronze contacts of ample capacity for all low voltage work.

No. 44 — Pressure on nosing opens the circuit. No. 45—Pressure on nosing closes the circuit. No. 46—Momentary contact; pressure on nosing makes then breaks the circuit and repeats the operation in returning to normal.

Weight ½ lb. Standard Package 6.

No.	44	45	46
Each	$1.10	$1.10	$1.10

DOOR TRIP

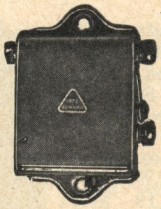


No. 236
Trip

Non-insulated external mounting. Makes and breaks only as door opens.

Cat. No.	Open Circuit Springs	Std. Pkg.	List Price
236	Door trip	3	$2.48

CONSTANT RING DROP



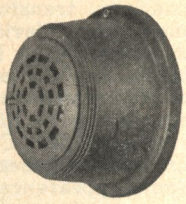
No. 26

To cause any alarm to ring continuously until drop is reset, 6-8 volts D.C. 8-12 volts A.C. No. 26 cuts own magnet out of circuit reducing battery drain. Add $3.85 to list for special voltages.

26	Constant ringing drop	$6.49

THE ADAPTAHORN

Amp for Amp . . . the Loudest Horn on the Market



The clear, loud tone of the Edwards Adaptahorn penetrates even the most difficult noise levels . . . makes it ideal for schools, factories, wherever quality horns are needed. Muting feature gives wide choice of loudness.

LOUDNESS MEASUREMENTS

No.	DBS. at 10 Ft.*	A.S.A. Loudness Units	Voltage
370	94	52,000	115 V. 60 Cyc.
372	91	40,000	115 V. 60 Cyc.
374	98	80,000	115 V. 60 Cyc.

**In accordance with NEMA Proposed Standard for Noise Measurements, Adaptahorn ratings are at 10 feet, instead of source . . . since rating at source results in no practical value.*

RUGGED CONSTRUCTION—Shock-proof case is die-cast Zamak #3. Rugged construction and mounting of movement eliminates failure or re-adjustment after severe long-life tests. Mechanism is sealed to lock out dirt, bugs, dust.

QUICKER INSTALLATION—Simply mount plate to wall or any standard outlet box with single gang cover, or single gang Condulet or Wiremold type fitting. Connect wires on large, convenient binding posts, slip the Adaptahorn on the sturdy hanger and push into place.

INTERCHANGEABLE — Grille type and Projector Adaptahorns can be readily interchanged with 6" and 10" Adaptabels since all use same mounting plate.

DEFIES SEVEREST WEATHER—The Adaptahorn has Underwriters "Weatherproof Listing" and will withstand severest conditions with an Edwards No. 349 gasketed, cast aluminum Back Box. This box is drilled and tapped to take one ½ inch conduit which can be installed at any 90° position. Bosses also provided at opposite side and back for other requirements.

Cat No.		Width	Depth	Std. Pkg.	Shp. Wt.	List Price
372	projector A.C.	7"	10⅜"	1	6¾	$26.50
373	projector D.C.	6½"	9⅛"	1	6¾	36.50
374	grille A.C.	7"	4"	1	5¾	20.50
375	grille D.C.	6½"	4⅛"	1	5¾	30.00

EDWARDS FLUSH HORN—For flush installation, the same mechanism is mounted on a Zamak #3 die-cast housing and face plate. This unit fits into a 5½" square back box with a simple plug-in connection similar to Adaptahorn.

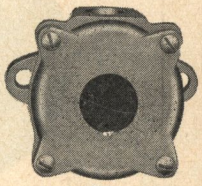
370	flush A.C.	6½	1	3¾	33.00
371	flush D.C.	7⅛	1	3¾	36.50

No. 370 Wallcut size 5⅝x5⅝x3" deep
No. 371 Wallcut size 5⅛x6⅝x3" deep
Faceplate size: 7⅛x7⅛"

EDWARDS PUSH BUTTONS

EDWARDS WEATHERPROOF PUSH BUTTONS

Surface type light grey finish. For 125 volts or less. Cast aluminum housing thoroughly gasketed for exposed installations. Composition diaphragm covers both center of push and mechanism compartment to insure complete protection from the elements. Drilled and tapped for ½" conduit (¾" if so specified). Every possible precaution is taken to prevent any moisture whatsoever from entering mechanism at any part from the plunger to the wire lead. Dimensions: approx. 2¾" x 2⅜" by 2" deep.



1785

No. 1785 ..... Surface Type, Weatherproof Push
Price $11.00

LOW VOLTAGE TYPE

A greatly improved and very attractive all metal, weatherproof push. Neat solid brass push is dependable for use outside of buildings, industrials, residences, for marine work, ice-plants, chemical plants, etc., where dampness, exposure of fumes would corrode or destroy the mechanism of the ordinary push button. Under solid brass push button center is a watertight leather diaphragm protecting the entire mechanism. Phosphor bronze contact springs. See illustration for conduit arrangement. Brass plate is threaded for ½" conduit. Standard finish: polished brass.

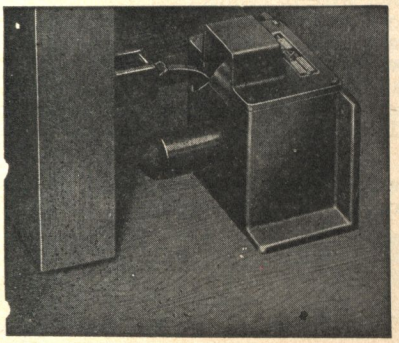


1786C

No. 1786 Surface Type Weatherproof Push $6.60
No. 1786-C Surface Type Weatherproof Push with Conduit Plate 9.35

Edwards Co., Inc. also make a complete line of navy approved bells, buzzers, horns, sirens, pushes, annunciators, thermostats, connector boxes, etc. Details upon application.

No. 175—EDWARDS DOOR RELEASE



For use in office, banks, etc., where it is desired to be able to close a door from a remote location. Used in conjunction with a door check, this release keeps the door open until energized from a remote push button. Cast bronze housing. 4⅛" high, 4-9/16" wide, 4⅛" deep. Drilled for floor or wall mounting.

No. 175.....Weight 7 lbs. ..... each $121.00
No. 175-F.....Flush ..... each 148.50

EDWARDS SIGNALING DEVICES

THE NEW ADAPTABEL



No. 340 VIBRATING ADAPTABEL

New heavy duty bells for individual use or for signaling and protective systems. Many times louder than any other bells made. Die-cast Z-metal construction. Self-compensating mechanism requires no adjustment for normal wear during life of bell. Low current consumption for great tone volume. Saves time, labor, money—specially designed for easy installation on any type of fitting or with surface mounting. Underwriters Approved as Weatherproof Units when installed with Edwards Gasketed Back Boxes.

Size	24 V., 60 Cyc.	115 V., 60 Cyc.	Other Voltages and Cycles to 250 V., 60 Cyc.
4″	$22.00	$27.50	$33.00
6″	31.00	37.00	41.00
10″	41.00	44.00	55.00

No. 348—Cast Back Box and Gasket for 4″ No. 340 Adaptabel $6.60.

No. 349—Cast Back Box and Gasket for 6″ or 10″ No. 340 Adaptabel $6.60.

No. 561—D.C. ADAPTABEL

This versatile Adaptabel for D.C., use can be mounted on any type of switch, octagon or square box, Wiremold or Condulet.

No.	6 V.D.C.	24 V.D.C.	115 V.D.C.	Other Voltages to 250 V.D.C.*
341—4″	22.00	25.30	27.50	33.00
561—6″	31.00	33.00	37.00	41.00
561—10″	41.00	41.00	44.00	55.00

* Maximum voltage on 4″ is 115 V.D.C.

SINGLE STROKE TYPES

Same construction as described above. Same prices as listed above. Specify No. 562. Same price as No. 340 for A.C. No. 563 for D.C. Same price as No. 561.

EASI-MOUNT TRANSFORMERS

Underwriters Listed for mounting on any outlet box or cabinet with ½″ knockouts or alone on any surface without box. Replaces old style Chime, Doorbell and Tri-Volt Transformers. No plates needed for any type of mounting. Expandable Nipple is inserted into ½″ knockout; non-removable set-screw fastens from the outside of the outlet box or cabinet. Easily and quickly installed: (1) on side of outlet box, (2) on round or square outlet box cover, (3) on side of fuse or switch cabinet, (4) on any surface by means of integral mounting flanges with easy-to-position screw slots. Size: 2-5/8″ high, 2-5/8″ wide, 1-7/8″ deep.

No.	Description	Primary V.	Primary Cyc.	Secondary V.	Secondary Cyc.	Price
*890	Doorbell Type	115	50-60	10	5	$2.42
*892	Chime Type	115	50-60	16	10	3.52
894	Chime Type	115	50-60	16	10	3.03
896	Tri-Volt 3-Watt Type	115	50-60	6-12-18	5	3.06

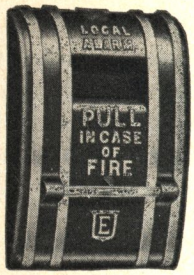
*Underwriters Listed.

230-volt and 25-cycle transformers on request. Details on application.

EDWARDS FIRE ALARMS



No. 78
Fire Alarm



Single-Action
Non-code Fire Alarm

Breakglass type for open or closed circuit operation up to 48 volts. Red plastic, 2⅞″ x 4⅝″ x ¾″, mounts surface or on gem box or single gang plaster cover. Reversible glass holder marked "FIRE" on one side, "Emergency" on other. Price $4.51.

Zinc Die Cast Station (3⅞″ x 4½″ x 1″). Single pole switch is standard. Double pole normally open or closed and for city shunt or tripper connection available on request. Simple to test, red finish. Mount on 4″ square or 4⅛″ square box 1½″ deep plus plastic cover ½″ minimum. No. 270 Breakglass. No. 271 Non-breakglass. Prices on request.

	Price Single Pole	Price Double Pole-Switch Open
No. 270	$14.00	$17.00
No. 271	14.00	16.00

HOME FIRE ALARM



The Edwards Home Fire Alarm is designed to give fast warning of the danger of fire. This system uses safe, low cost bell wire to connect thermal detectors to signal unit which is mounted near master bedroom. Detectors mounted near heating unit and in storage areas will protect 400 square feet each and sound an alarm if temperature goes over 140°F.

To test detector unit, place a match under detector. When alarm sounds, remove heat and alarm will cease.

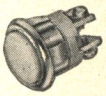
No. F-100 Home Fire Alarm, flush mounting, includes one F-10 unit, and two No. 243 detectors .... $24.95, Schd. S pkg. 3.

No. F-200 Home Fire Alarm, surface mounting, includes one F-12 unit and two No. 243 detectors $24.95, Sched, S pkg. 3.

No. 243 additional detectors for above systems $3.50 each.

EDWARDS SIGNALING DEVICES

LOW VOLTAGE FLUSH PUSH

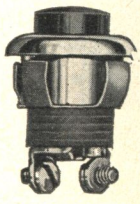


No. 620

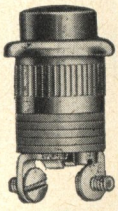
Longlife, molded center in heavy nickel rim. Positive self-cleaning contacts. Heavy brass springs and plunger. Large, strong terminals. Up to 50 volts. A.C. or D.C. operation.

No. 620 5/8" Forced Fit. Polished Nickel.. $0.44
No. 59—Flush Push. Flat pearl center with spring clips for mounting in 3/4" hole. Rim is 1/8" wide. $1.10

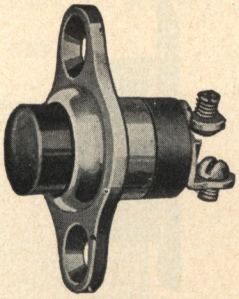
PROTRUDING CENTER PUSHES



No. 621



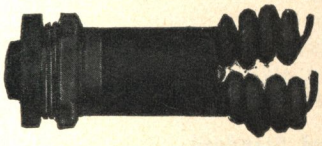
No. 116



No. 622

Number	Description	Weight Ozs.	Std. Pkg.	List Price
621	With Spring Clips..5/8" hole	4	6	$1.05
116	Forced Fit .....1/2" hole	4	1	1.95
622	With Escutcheon ...5/16" hole	4	6	1.54
623	With Locknut .....5/8" hole	4	6	1.32

HIGH VOLTAGE PUSHES



Underwriters' Approved, 125 volts, A.C., 6 amp. Strong, sturdy, quick make and break. Fits 3/4-in. hole. Has locknut for fastening to plate or panel.

No.		List Price
850	As described	$4.84
851	Pendant Push, Bakelite Case.....	8.80
852	Weatherproof on Switch Plate....	11.00

STAMPED SURFACE PUSHES

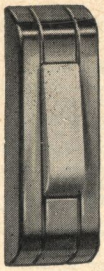


600 & 603

Standard finish—Sprayed Satin Brass.

No.	Standard Package	Size	List Price Each
600	12	2 1/16 in. Dia.	$0.30
603	12	1 3/4 in. Dia.	0.30

CONTACT DEVICES

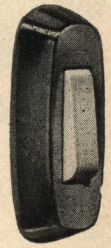


TRADITIONAL Slim shape for narrow moldings. Glowing brass harmonizes with traditional themes.

- Theft-resistant mounting
- Mounts on narrow door trim
- No holes to drill
- Complete mounting instructions

No.	Type	List Price	Sched. Pkg.	Shpg. Wgt.
643	Traditional	$2.11	S-3	1/2

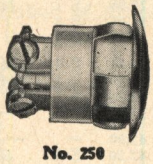
SOLID BRASS PUSHES



Forged of solid brass, these buttons are polished to a high lustre and coated with tarnish-proof transparent plastic. The operating mechanism is the result of years of development. The piano-type action requires only the slightest pressure . . . guarantees against sticking.

No.	Type	List Price	Sched. Pkg.	Shpg. Wgt.
644	Contemporary	$2.11	S-3	1/2

MULTIPLE CONTACT PUSHES



No. 250

Heavy, lifetime silver plated contacts are self-cleaning in operation. Large terminals in tough plastic shell. Spring clips for forced fit in 3/4" hole. Up to 50 Volts A.C. or D.C. operation.

No. 250	Four Point, Normally Open	$2.31
No. 251	Two Point, Closed Circuit	3.41
No. 255	Three Point, "Return Call" Push...	3.19

KEYNOTE PUSH BUTTON



The Keynote push button has a classic thin design with a key type center similar to that of a piano key.

Comes in four combinations of permanently colored plastic—brass, chrome, brown and ivory.

Easy installation—attach two wires and mount with two screws.

Cat. No.	Description	List Price
634	Brown, ivory center	$ .33
635	Ivory, brown center	.33
636	Brass, ivory center	.54
637	Chrome, black center	.65

EDWARDS CONTACT DEVICES

EXECUTIVE PUSH BUTTON



No. 200
1 push button

Molded of lustrous french grey Styrene for attractive appearance and durability. Does not crack or chip. Wide push button bars are spaced out for easy selection yet two button model is only 1¼" x 2½". Names are easily inserted . . . right in button . . . and are magnified for quick identification. A soft, positive action is guaranteed by fine, long-life silver overlay contacts.

Simplified wiring, wide range of sizes and accessories, makes it easy to solve the most difficult applications.



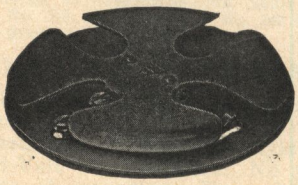
No. 300
8 push buttons

Available in one, two, four and six button sizes, without cord, with six foot polyvinyl cord and connector block and with cord, connector block and buzzer. Standard titles and designations are included.

Where eight or more buttons are required the Cat. No. 300 series with grey steel case and buttons should be specified.

Cat. No.	No. of Buttons	Description	List Price	Sched. Pkg.	Shpg. Wgt.
200	1	Set without cord	4.73	S 1	⅛
200	2	Set without cord	5.72	S 1	⅛
200	4	Set without cord	8.25	S 1	¼
200	6	Set without cord	13.75	S 1	½
200C	1	Set w/cord & connector blk.	8.58	S 1	½
200C	2	Set w/cord & connector blk.	10.56	S 1	½
200C	4	Set w/cord & connector blk.	15.13	S 1	¾
200C	6	Set w/cord & connector blk.	23.10	S 1	¾
200CB	1	Set w/cord, connector, buzzer	18.15	S 1	¾
200CB	2	Set w/cord, connector, buzzer	20.08	S 1	¾
200CB	4	Set w/cord, connector, buzzer	28.88	S 1	1
200CB	6	Set w/cord, connector, buzzer	41.80	S 1	1
300	8	Set without cord	28.60	S 1	¼
300	10	Set without cord	33.55	S 1	¾
300	12	Set without cord	46.20	S 1	1
Additional buttons		per 4 buttons	17.20	—	—
300C	8	Set w/cord and connector blk.	42.90	—	—
300C	10	Set w/cord and connector blk.	47.30	S 1	¾
300C	12	Set w/cord and connector blk.	61.60	S 1	1
Additional buttons		per 4 buttons	22.60	S 1	1¼

No. 290—EDWARDS DIXIE FLOOR TREAD



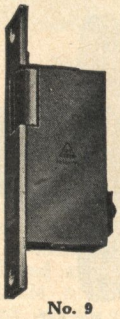
Recommended as a dining room floor push for calling servants during meals. Contact easily made by pressure at any point. Rubber covered base prevents push from sliding. The connectors are firm and reliable and the whole device is designed for quick easy installation. Cord enters through brass strap which holds it securely. Standard finish is satin brass.

Standard Package 3, Weight 1 lb.

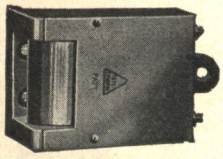
No. 290 ..... each $2.48

DOOR OPENERS

MORTISE TYPES. Where door thickness permits, it gives a neat flush installation. Cat. No. No. 154 with roller-nosing makes this the smoothest operating opener available. Beveled face plate for perfect fit measures 1¼" x 3⅜"; die cast body: 2" x 2⅞" x 1¼"; nosing opening 1¼". Cat. No. 9 is economical, simple in design, and uses standard type door opener mortise. Solid brass face plate 5⅞" x 1¼"; body size 3⅝" x 2⅛" x 1". Forged brass nosing has 1 3/16" opening.



No. 9



No. 152

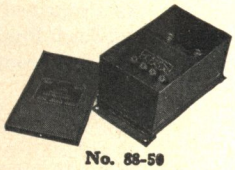
Cat. No.	Std. Pkg.	Shpg. Wt.	List Price
9	6	5	$5.78
152	1	1	8.25
154	1	¾	9.90

SIGNALLING TRANSFORMERS

Enclosed Standard

Designed to have more wattage capacity, and supplied with a greater number of low voltage taps than the bell type.

These transformers have a wide secondary range of 4-8-12-16-20-24 volts.



No. 88-50

115 Volts—60 Cycles

Cat. No.	Watts	Overall Dimens. Hght.	Wdth.	Lgth.	Approx. Wt. Lbs.	Price Each
88-50	50	4¼	3⅜	7⅞	5⅛	$11.77
88-100	100	4 1/16	4⅝	8⅝	8⅝	.19.00
88-250	250	6	5⅛	9⅛	16⅛	48.40
88-500	500	6½	6½	12⅛	34⅛	74.80
7194	750	6½	7½	14½	42	79.85
7195	1000	6½	9¾	14½	58¼	100.75

Ratings apply to 24-volt tap. Proportionately less watts are delivered on lower voltage taps: example, No. 88, 50 watts at 24 volt, and only 25 watts at 12 volt.

EDWARDS SIGNALING DEVICES

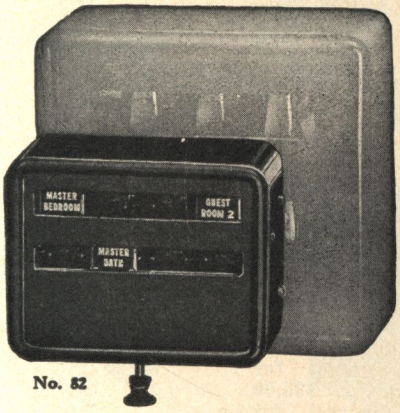
NEW EDWARDS ANNUNCIETTES®

New design, more efficient, neater annunciators. Greatly reduced in size without affecting clearness of indication

Illustrations show remarkable size reduction as compared to old fashioned types. All metal cases. Flush types can be completely wired before face plate is installed. Desk type small and compact. Every Annunciette furnished with envelope of 100 assorted name and number cards, allowing definite markings for residences, banks, offices, etc. Electro-manual types have magnet reset mechanism. May be actuated from remote places. Ideal for multiple operation or remote control.

MANUAL RESET ANNUNCIETTES

SURFACE TYPE



No. 82

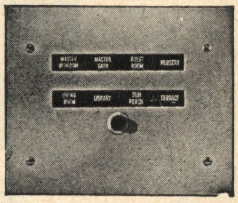
Cat. No. 82. The smallest and neatest Annunciator available without sacrificing clarity of indications. Standard features: 100 assorted indicator cards ½" x ⅞" wide; marked connectors for specially wound extension signals, wrinkle grey finish, 12 volts, 60 cycles; special voltages to 48 volts AC or 6 to 48 volts DC.

No. of Drops	No. 82 Manual Reset	Dimensions Inches Height	Width
4	$26.40	4⅜	5¼
8	40.70	4⅜	5¼
12	60.50	5	7 3/16
16	79.20	7 3/16	7 3/16
20	101.20	7 3/16	7⅞
24	121.00	7 3/16	8⅜
Per ea. Add 6 Drops	49.50	Depth,	2½

VOLTAGES, FINISHES, ETC.

8-12 Volt A.C. operation with buzzer signal standard on Manual Reset. 16V. D.C. or 24V. 60 cyc. on Electric Reset. Surface types—light grey. Desk types—grey. Any other spray finishes, add 25 per cent. Special voltages up to 48 volts, add to list 25 per cent for Manual Reset. For Electric Reset, add to list 25%.

FLUSH TYPE

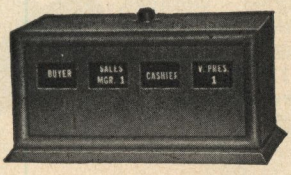


Flush No. 672

Cat No. 672 Flush Annunciette same as No. 82 but for flush mounting. White finish. Wall box requirements: No. 671-A, 4 and 8 drops; No. 671-B, 12 drops; No. 671-C, 16 drops; No. 671-X, specify number of drops.

No. of Drops	No. 672 Manual Reset	Wallcut Inches Height	Width
4	$33.00	4⅝	5⅞
8	47.30	4⅝	5⅞
12	68.20	4⅝	7⅞
16	88.00	6¼	7⅞
20	110.00	7⅞	7⅞
24	132.00	7⅞	7⅞
Add per 6 Drops	50.60	Depth,	3

DESK TYPE



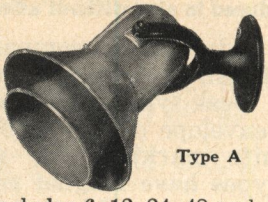
Desk No. 673

In case for top of desk mounting reset buttons on top of case. 100 name and number cards are furnished with each Annunciette.

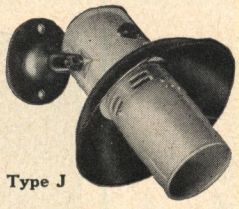
No. of Drops	No. 673 List Price	Overall Height	Dimensions—Inches Width
2	$55.00	2½	4
4	79.20	2½	5
6	99.00	2½	7
8	121.00	2½	9
Larger Sizes, Add per 6 Drops	71.50	Depth, 2⅝ in. for all sizes	

FEDERAL SIRENS

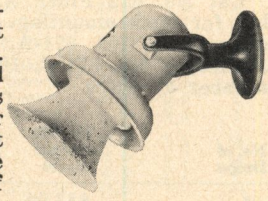
INDUSTRIAL SIRENS


Type A

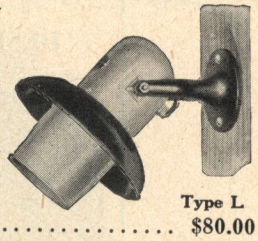
TYPE A SIREN—A long-time favorite for all purposes. Has quick pick-up to high maximum pitch for contrast with industrial and traffic noises. Has ⅓ horsepower sound output at 150 watts. Complete with adjustable bracket and weatherproof housing. Choice of voltages includes 6, 12, 24, 48 and 110, for 25 to 60 cycle AC, or DC. Siren length, excluding bracket 11½": diameter 10½". Net weight 13 lbs. Shipping weight 15 lbs.
Price $65.00


Type J

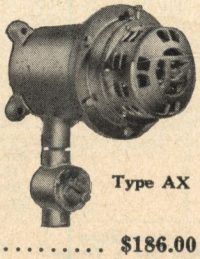
TYPE J SIREN—Similar to the type A but has heavy duty motor for severe services on cranes and other heavy industrial equipment. Choice of 110, 220 or 250 volts, 25 to 60 cycle AC, or DC. Length 12". Diameter 11½". Net weight, 15½ lbs. Shipping weight, 18 lbs. Price $75.00


Type D

TYPE D SIREN—Also similar to the types A and J but with a more powerful motor. Produces ½ horsepower sound output on 215 watts. Its deeper tone carries farther and provides better contrast where ambient noises are high pitched. Weatherproof construction and adjustable bracket included. Choice of 6, 12, 24, 48 or 110 volts, 25 to 60 cycle AC or DC. 12" long and 9½" in diameter. Net weight 14 lbs. Shipping weight 17 lbs. Price $70.00

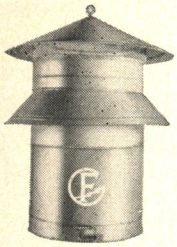

Type L

TYPE L SIREN—The heavy duty version of the type D Siren, for heavy industrial use and higher voltages. Choice of 110, 220 or 250 volts, 25 to 60 cycle AC or DC. Length 11½": diameter 11½". Net weight 16½ lbs. Shipping weight 19 lbs.
Price $80.00


Type AX

MODEL AX EXPLOSION PROOF SIREN—Similar in sound output to the models A and J siren. Meets rigid Underwriters' specifications for use in Class I group D and Class II groups F & G hazardous locations, 110 volts only AC or DC. Length 10": diameter 7". Net weight 16 lbs. Shipping weight 19 lbs.
Price $186.00

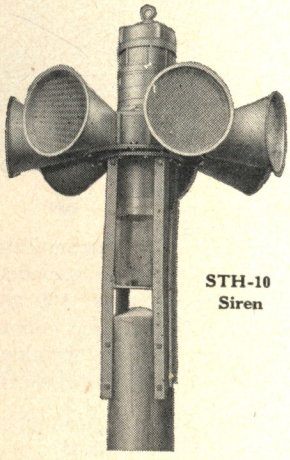
VERTICAL SIRENS


5 H.P. Siren

Large vertical sirens are excellent and comparatively inexpensive signals for fire, air raid, and other alarm purposes in industry or municipality. The vertical design distributes sound waves radially over distances averaging ½ to 2 miles, depending on local conditions. Specially designed ball bearing motors assure quick pick-up and high output. Price includes weatherproof housing. The two horsepower universal motor will also operate on DC. All others are for 60 cycle AC operation with choice of voltage as tabulated below. The model STH-10 differs radically in design and appearance, with sound output proportionally higher than its horsepower indicates.

Model	H.P.	Phase	Voltages	Shpg. Wt.	Price
2	2	1	110 or 220	70	$250.00
5	5	3	220/440	300	500.00
5	5	1	220	325	650.00
7	7½	3	220/440	440	550.00
7	7½	1	220	460	700.00
STH-10	10	3	220/440	450	750.00
STH-10	10	1	220	470	900.00

REMOTE CONTROL RELAYS—Must be used with all large sirens to permit remote operation by push button, timers, alarm boxes, or program clocks.
Remote Control for # 2 Sirens .. $35.00
Remote Control for # 5, 7, and ST Sirens:
Three phase .. $60.00
Single phase.. 80.00


STH-10 Siren

CONTROL DEVICES

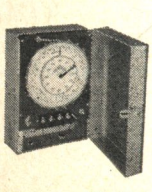
FIRE ALARM PULL BOX—A pull of the handle winds the clockwork actuated contacts to sound the siren up and down scale for 2 minutes and then stop. No voltage limitations.

PREDETERMINED GENERAL ALARM CONTROL — Operates the siren up and down scale for 2½ minutes but can be actuated by one or more remotely located start only push buttons. Choice of 110 or 220 volts.


Pull Lever Box

PROGRAM CLOCK—Can be set to blow the siren one blast at a time or test signal at any five minute interval in a 24 hour day. Choice of 110 or 220 volts, 60 cycle AC. Has self starting motor.

Pull Lever Box (as illustrated)	$70.00
Pull Lever Box—weatherproof	100.00
Predetermined General Alarm Control	75.00
Push button for above	5.00
Push button in weatherproof break glass box	20.00
Model # 75 Program and Test Clock	75.00

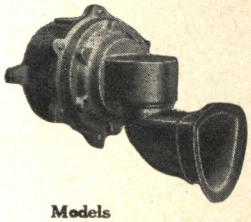

Program Clock

FEDERAL ELECTRIC HORNS

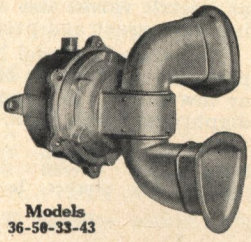
Available in a variety of models. Excellent signals for coding as well as alarm. Standard Horns are the familiar industrial type. Hi-Power Horns, twice as loud as the standard, for larger or nosier areas. Resonating Horns, twice as loud as the Hi-Power, also have distinctive trumpet tone. Motor Driven Horns less powerful than the Resonating but have another distinctive sound. They are not satisfactory for fast code signals.

All Federal Electric horns are offered in a variety of standard voltages between the minimum and maximums listed below. AC models are 60 cycles but 25 cycles are optional. DC models available are listed separately. Finish is pearl gray baked enamel unless otherwise noted. All tapped for ½" conduit.

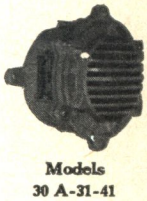
VIBRATORY HORNS



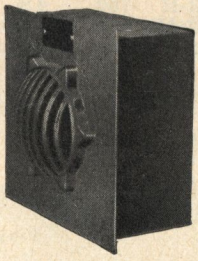
Models 30-35-32-42



Models 36-50-33-43



Models 30 A-31-41



Models F30B - F31B - F41B

Two major classes, Standard and Hi-Power, with choice of grille, single, or double projector. Constructed of non-corrodible material. Concealed conduit mounting is optional if specified. Projectors may be rotated 180° to direct sound. Flush type also available.

STANDARD HORNS — Weatherproof Models

Model	Voltages	Description	Shpg. Wt.	Price
30A	6-250 AC	Grille	4¼ lbs.	$19.50
30	6-250 AC	Single Projector	6½ lbs.	26.50
50	6-250 AC	Double Projector	7¼ lbs.	35.00

STANDARD HORNS — Interior Type

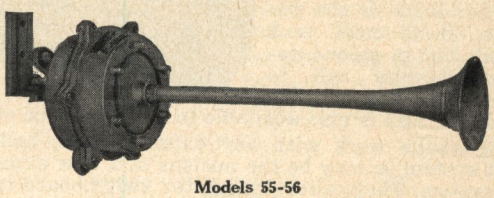
35	6-250 AC	Single Projector (Red)	6¼ lbs.	22.00
36	6-250 AC	Double Projector (Red)	7¼ lbs.	30.50
F30B	6-250 AC	Flush Type (Prime Finish)	6½ lbs.	29.00

HIGH POWER HORNS Identical in appearance and dimensions with respective Standard Models. Also available in DC.

Model	Voltages	Description	Shpg. Wt.	Price
31	6-250 AC	Grille	4½ lbs.	$20.50
41	6-250 DC	Grille	4½ lbs.	30.00
32	6-250 AC	Single Projector	6¾ lbs.	27.50
42	6-250 DC	Single Projector	6¾ lbs.	36.50
33	6-250 AC	Double Projector	7½ lbs.	36.00
43	6-250 DC	Double Projector	7½ lbs.	44.50
F31B	6-250 AC	Flush Type	6¾ lbs.	30.00
F41B	6-250 DC	Flush Type	6¾ lbs.	36.50

RESONATING HORNS

The loudest electric horns. Weatherproof models have swivel bracket, straight projector, and pearl gray finish. Interior types have coiled projector, plug-in mounting and red finish.

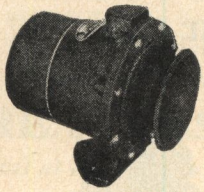


Models 55-56

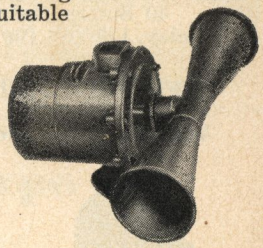
Model	Voltages	Description	Shpg. Wt.	Price
55	24-250 AC	Weatherproof	11	$65.00
56	6-250 DC	Weatherproof	11	65.00
53	24-250 AC	Interior	10	60.00
54	6-250 DC	Interior	10	60.00

MOTOR DRIVEN HORNS

Less powerful than the Resonating but a distinctive toned alarm signal. Not suitable for use with paging devices.



Models 20-21



Models 60-61

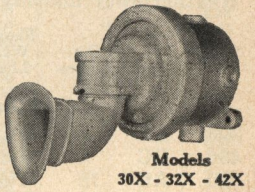
Model	Voltages	Description	Shpg. Wt.	Price
20	110-220-250 AC	Sgl. Projector	12	$78.50
21	110-220-250 DC	Sgl. Projector	12	78.50
60	110-220-250 AC	Dbl. Projector	15	87.50
61	110-220-250 DC	Dbl. Projector	15	87.50

EXPLOSION PROOF HORNS

A number of electric horns are available in explosion proof construction meeting class 1 group D requirements. Model numbers are similar to corresponding non-explosion proof units but have an X appended. Resonating and all DC explosion proof horns are furnished complete with an explosion proof splicing conduit which is not required in other models.



Models 31X - 41X



Models 30X - 32X - 42X

Model	Voltages	Description	Shpg. Wt.	Price
30X	110-220 AC	Standard	11½ lbs.	$55.00
31X	6-250 AC	Hi-Power	11½ lbs.	60.00
41X	6-250 DC	Hi-Power	11½ lbs.	73.00
32X	6-250 AC	Hi-Power	13 lbs.	63.50
42X	6-250 DC	Hi-Power	13 lbs.	76.50
33X	6-250 AC	Hi-Power	14 lbs.	67.00
43X	6-250 DC	Hi-Power	14 lbs.	80.00
55X	110-220 AC	Resonating	23 lbs.	100.00
56X	110-220-250 DC	Resonating	23 lbs.	100.00

FEDERAL PAGING DEVICES

SIGNAKALL



The Federal Push-button Signakall, SK2 (illustrated) initiates 20 different code signals. The selector knob in one position limits calls to 3 rounds but in second position permits call to repeat until shut off. The 40 button SK4 is also available in the same size case.

Signakalls work with any existing horn, bell or light system or may be the nucleus of a new expanding system. They relieve congested switchboard traffic; free held telephone lines; and speed location of key personnel. Signakall actuated systems prove indispensable in busy offices, stores, factories and institutions.

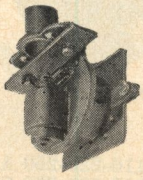
Signakalls operate on 110 volt, 60 cycle AC current. Use of a 110 volt line relay permits operation of low or high voltage signal circuits. Both models measure 12¼ x 6⅛ x 6¼ inches.

Model	Description	Net Wt.	Shpg. Wt.	Price
SK2	20 Button Model	6	15¼	$175.00
SK4	40 Button Model	8½	17½	330.00
Line Relay, 110-volt (up to 10 amp. capacity)				20.00

FEDERAL INDUSTRIAL BELLS

Vibrating, Single Stroke and chimes





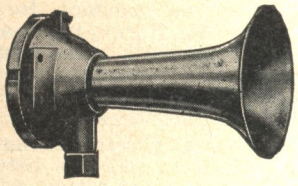
Superior bells for all purposes. Strong impulses and special drawn steel gongs assure maximum sound output. Standard model bells are weatherproof and will be so furnished unless options are specified.

Optionally available when specified, with plug in feature for surface or concealed conduit mounting on any standard outlet box. No extra charge for this specified option on the bells. It is standard construction on the chime, which is primarily for interior use in quiet areas such as offices, etc.

Bells are available for D.C. as well as A.C. 60 cycle. No extra charge for 25 cycle if specified. Special voltages also available up to 250 volts. Weatherproof housings tapped for ½" conduit.

Model No.	Cur.	Dia. Inches	Shpg. Wt. Lbs.	Price 6 or 12V	24V	115V	Other
Vibrating Bells							
306	AC	6	6¼	....	$31.00	$37.00	$41.00
406	DC	6	6¼	31.00	33.00	37.00	41.00
310	AC	10	8½	....	41.00	44.00	55.00
410	DC	10	8½	41.00	41.00	44.00	55.00
Single Stroke Bells							
106	AC	6	6¼	....	31.00	37.00	41.00
206	DC	6	6¼	31.00	33.00	37.00	41.00
110	AC	10	8½	....	41.00	44.00	55.00
210	DC	10	8½	41.00	41.00	44.00	55.00
Chimes							
101	AC	Bar	7	....	29.00	33.00	37.00
201	DC	Bar	7	....	29.00	33.00	37.00

FEDERAL COMPRESSED AIR HORNS



For industries and municipalities, wherever a loud distinctive general alarm or code signal is desirable.

For short codes or prolonged alarms, Federal air horns are ideal. Each successively larger whistle has a deeper and more powerful tone. Projectors are specially machined cast bell bronze. Horns are available for specific pressures ranging from 15 pounds upward.

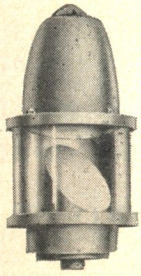
Diaphragms of special metal will last almost indefinitely at proper working pressure. Hand valves or electric valves also are available at prices depending on current and pressure characteristics required.

Numerals in Model Nos. indicate diameter of diaphragm. Letters H, M, or L indicate high, medium or low pitch. For example, Model 10-L is a 10-in. diaphragm pitch horn, etc.

Model No.	Frequency in CPS	Length Overall Inches	Pipe Size Inches	Shpg. Wt. Lbs.	Price Each Horn	Hand Valve	Elec. Valve
Screw Type Connection							
3-H	750	4⅞	⅜	4½	37.50	12.00	20.00
3-M	510	6¾	⅜	5½	45.00	12.00	20.00
3-L	390	12¼	⅜	7½	52.50	12.00	20.00
4-H	450	7¾	½	7½	55.00	15.00	35.00
4-M	340	11	½	12	85.00	15.00	35.00
4-L	300	14½	½	17	100.00	15.00	35.00
6-H	295	12¾	¾	30	150.00	18.00	55.00
6-M	255	16½	¾	35	170.00	18.00	55.00
6-L	190	19	¾	40	200.00	18.00	55.00
Flange Type Connection							
8-H	240	15¾	¾	60	225.00	20.00	60.00
8-L	170	23¾	¾	65	325.00	20.00	60.00
10-H	200	16¾	1	75	300.00	23.00	75.00
10-L	125	25½	1	110	400.00	23.00	75.00

Valves are available for any common voltage in D.C. from 6 to 250 volts; for 60-cycle A.C. in 24, 110, 208, 220, and 240 volts; and for 25-cycle A.C. on 110, 220, and 440 volts.

FEDERAL BEACON-RAY LIGHT



The finest general alarm warning device by itself or to supplement audible signals in extremely noisy areas. A signal long needed in an infinite number of applications. An excellent signal in any danger spot such as drawbridges and other navigational or industrial hazards. Also an exceptional "attention getter" on electric signs, drive-ins, etc.

The standard model is for 110 volt 60 cycle A.C. Available in a choice of red, green, blue, amber, or clear white lenses. Equipped with ½" pipe flange and two wire leads for simple easy mounting. Requires no transformers, rectifiers, etc. Finish is hammertone grey enamel.

Special models for other electric requirements available on inquiry.

Model	Volts	Height	Dia.	Shpg. Wt.	Price
27-S	110 AC	14"	6¼"	6 lbs.	$65.00

EDWIN L. WIEGAND COMPANY

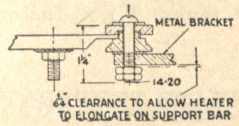
GENERAL INFORMATION ABOUT STRIP HEATERS

STANDARD strip heaters are provided with mounting tabs at each end for air heating applications and for clamping to cylindrical surfaces. Slotted mounting holes are 5/16" wide x ½" long.

1. **BLUNT END STRIP HEATERS**—Without tabs. Stock shipment. Utility clamps are used for clamping these strip heaters to the surface to be heated, mounting tabs are not used.

Overall lengths are indicated in the standard and also in the Blunt End construction.

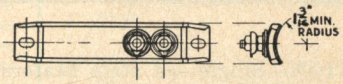
2. **WHERE POWER SUPPLY** is higher than 460 volts, strip heaters can be connected in series provided they are mounted on secondary insulating bushings. Price per set for one strip heater $1.00.



3. **SELECTION AND APPLICATION**—To select suitable strip heaters that will operate within safe temperature limits.

For heating air and gases containing moisture, oil fumes, etc—write us for recommendations. Utility clamps should be used in applying strip heaters.

4. **STRIP HEATERS FOR CLAMPING TO ROUNDED SURFACE**—For clamping lengthwise along a pipe or tank of small diameter. Types S, SE, SNH and NH only can be supplied with their cross sections curved to any one of the following radii—1 5/16", 1 7/16", 1¾", 2¼" and larger. ADDITIONAL list $ .95 per strip. Shipment two weeks.



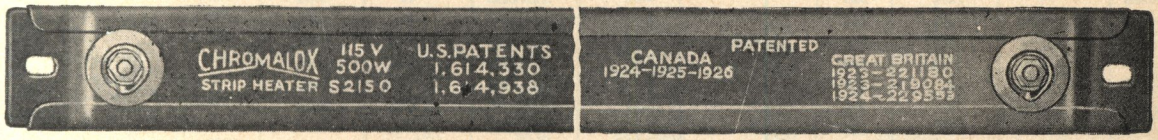
"SE" STRIP HEATERS CAN BE CURVED TO A MINIMUM RADIUS OF 1 3/16 INCH

5. **EXTRA CHARGE FOR SPECIAL RATING**—Wattages and voltages listed below are standard—other wattages or voltages for a standard size strip heater can be supplied (within reasonable limits) at 10% additional charge (minimum extra $10.00). If order value of item (one size strip heater) is $200.00 or more, no additional charge is made.

6. **WEIGHT OF STRIP HEATERS**—All strip heaters 1½" wide weigh approximately ¾ pound per foot. Strip heaters 2½", 1" and ¾" wide can be figured accordingly.

Chromalox STRIP HEATERS—Type S

with one bolt terminal at each end



MAXIMUM SHEATH TEMPERATURE 750°F.
(Sheath of Rust-Resisting Iron)

Catalog Number	Overall Length, Inches *Standard	Overall Length, Inches Without Mounting Tabs	Watts	Be Sure To Specify Volts 115 or 230	Price Each
S-815	8	6½	150	115 or 230	$3.20
S-920	9½	8	200	"	3.40
S-1225	12	10½	250	"	3.40
S-1430	14	12½	300	"	3.65
S-1532	15¼	13¾	325	Specify	3.75
S-1837	17⅞	16⅜	375	Voltage	3.80
S-1850	17⅞	16⅜	500	"	3.80
S-1950	19½	18	500	"	3.85
S-2050	21	19½	500	"	3.90
S-2425	23¾	22¼	250	"	4.00
S-2450	23¾	22¼	500	(Also 250 V.)	4.00
S-2575	25½	24	750	115 or 230	4.40
S-2670	26¾	25¼	700	"	4.45
S-3075	30½	28	750	"	5.10
S-3375	33½	31	750	"	5.50
S-3610	35⅞	33⅜	1000	"	5.85
S-3810	38½	36	1000	"	6.35
S-4312	42½	40	1250	"	7.00

MAXIMUM SHEATH TEMPERATURE 1200°F.
(Sheath of Heat-Resisting Chrome Steel)

Catalog Number	Overall Length, Inches *Standard	Overall Length, Inches Without Mounting Tabs	Watts	Be Sure To Specify Volts 115 or 230	Price Each
S-802	8	6½	250	115 or 230	$4.70
S-903	9½	8	300	"	4.90
S-1202	12	10½	250	"	5.25
S-1205	12	10½	500	"	5.25
S-1405	14	12½	500	"	5.50
S-1505	15¼	13¾	500	Specify	5.55
S-1805	17⅞	16⅜	500	Voltage	5.95
S-1807	17⅞	16⅜	750	"	6.00
S-1801	17⅞	16⅜	1000	"	6.05
S-1905	19½	18	500	"	6.05
S-1907	19½	18	750	"	6.35
S-1901	19½	18	1000	"	6.35
S-2005	21	19½	500	"	6.35
S-2405	23¾	22¼	500	"	6.60
S-2407	23¾	22¼	750	"	6.60
S-2401	23¾	22¼	1000	"	6.95
S-2415	23¾	22¼	1500	"	6.95
S-2501	25½	24	1000	"	7.05
S-2607	26¾	25¼	750	"	7.15
S-3007	30½	28	750	"	7.80
S-3301	33½	31	1000	"	8.55
S-3601	35⅞	33⅜	1000	"	9.10
S-3801	38½	36	1000	"	9.40
S-4301	42½	40	1500	"	10.30

IMPORTANT—THESE NOTES APPLY TO ALL STRIP HEATERS

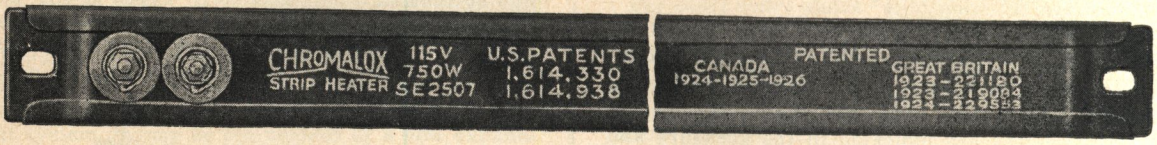
*Standard type has fastening tabs at each end (as illustrated) with slotted mounting holes 5/16" wide by ½" long for bolting to supports. Blunt end strips may be furnished with fastening tabs cut off about ¾" or 1¼" depending on overall length from each end for clamp-on applications. WHEN ORDERING be sure to specify Catalog Number, Voltage, Wattage, Strip Heater Element.

SPECIAL WATTAGE OR VOLTAGE other than listed add 10 % to prices shown for each item unless total value of order exceeds $200.00—Minimum list extra per item $10.00.

EDWIN L. WIEGAND COMPANY

Chromalox STRIP HEATERS—Type SE

with two bolt terminals at one end



APPLICATION—Single-end strip heaters, or strips having both terminals on one end, are more desirable for applications where the heaters are inserted from one end or are clamped on or between heavy metal plates. These units are widely used on gluing machines, embossing presses, shoe machinery, metal pattern plates for molding rubber, bakelite compounds, and similar applications.

NOTE—SE strips can be supplied with terminal covers—additional list of $1.65 per heater.

NOTE—Type SE strip heaters can be furnished with a cross-sectional or lengthwise curvature for clamping on pipes or tanks. Write factory for further information.

MAXIMUM SHEATH TEMPERATURE 750°F.

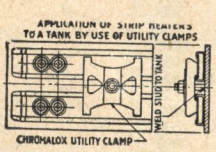
(Sheath of Rust-Resisting Iron)

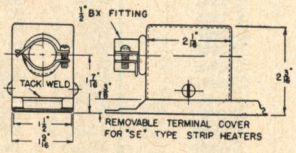
Catalog Number	Overall Length, Inches: Standard	Overall Length, Inches: Without Mounting Tabs	Watts	Be Sure To Specify Volts 115 or 230	Price Each
SE-815	8	6½	150	115 or 230	$3.20
SE-1025	10½	9	250	"	3.40
SE-1225	12	10½	250	"	3.40
SE-1430	14	12½	300	"	3.65
SE-1532	15¼	13¾	325	"	3.75
SE-1837	17⅞	16⅜	375	Specify	3.80
SE-1850	17⅞	16⅜	500	Voltage	3.80
SE-1935	19½	18	350	"	3.85
SE-1950	19½	18	500	"	3.85
SE-2050	21	19½	500	"	3.90
SE-2450	23¾	22¼	500	"	4.00
SE-2475	23¾	22¼	750	"	4.25
SE-2550	25½	24	500	"	4.30
SE-2575	25½	24	750	"	4.40
SE-2670	26¾	25¼	700	"	4.45
SE-3075	30½	28	750	"	5.10
SE-3375	33½	31	750	"	5.50
SE-3610	35⅞	33⅜	1000	"	5.85
SE-3880	38½	36	800	"	6.25
SE-3810	38½	36	1000	"	6.35
SE-4312	42½	40	1250	"	7.00

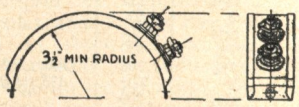
MAXIMUM SHEATH TEMPERATURE 1200°F.

(Sheath of Heat-Resisting Chrome Steel)

Catalog Number	Overall Length, Inches: Standard	Overall Length, Inches: Without Mounting Tabs	Watts	Be Sure To Specify Volts 115 or 230	Price Each
SE-802	8	6½	250	115 or 230	$4.70
SE-1003	10½	9	350	"	5.10
SE-1202	12	10½	250	"	5.25
SE-1205	12	10½	500	"	5.25
SE-1405	14	12½	500	"	5.50
SE-1505	15¼	13¾	500	"	5.55
SE-1805	17⅞	16⅜	500	Specify	5.85
SE-1807	17⅞	16⅜	750	Voltage	6.00
SE-1801	17⅞	16⅜	1000	"	6.05
SE-1905	19½	18	500	"	6.05
SE-1901	19½	18	1000	"	6.35
SE-2007	21	19½	750	"	6.35
SE-2405	23¾	22¼	500	"	6.60
SE-2407	23¾	22¼	750	"	6.60
SE-2401	23¾	22¼	1000	"	6.95
SE-2507	25½	24	750	"	7.05
SE-2501	25½	24	1000	"	7.05
SE-2601	26¾	25¼	1000	"	7.15
SE-3007	30½	28	750	"	7.80
SE-3001	30½	28	1000	"	7.80
SE-3307	33½	31	750	"	8.55
SE-3601	35⅞	33⅜	1500	"	9.10
SE-3801	38½	36	1000	"	9.40
SE-4301	42½	40	1500	"	10.30







"SE" STRIP HEATER CAN BE BENT TO A MINIMUM RADIUS OF 3½ INCHES

SHIPMENT—3 WEEKS FOR "LONG" TYPE STRIP HEATERS →

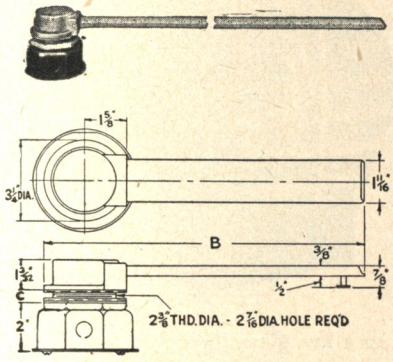
LONG TYPE SE STRIPS

SE-48	47⅞	45⅜	1350 or 2250	115 or 230	$14.20
SE-54	53⅞	51⅜	1500 or 2500	"	15.70
SE-64	63⅞	61⅜	1800 or 3000	"	18.05
SE-72	71⅞	69⅜	2000 or 3300	230 V. Only	20.05
SE-82	81⅞	79⅜	2250 or 3750	"	22.55
SE-92	91⅞	89⅜	2500 or 4000	"	24.85
SE-96	95⅞	93⅜	2750 or 4500	"	26.45

EDWIN L. WIEGAND COMPANY

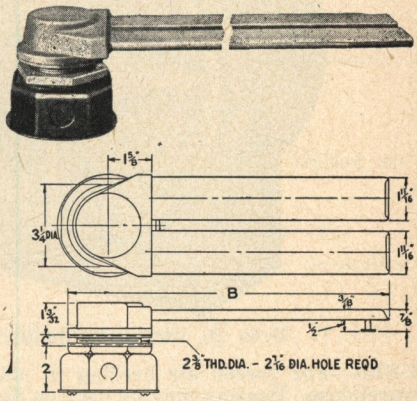
CHROMALOX IMMERSION HEATERS

Types MB-1 and MB-2



USES—In sterilizers, humidifiers, steam tables, etc., where minimum liquid depth is 1⅜".

TO INSTALL—Cut hole in bottom of tank (maximum thickness 7/16"), place heater so terminals go through hole, make electrical connections underneath tank. Lock nut and gasket supplied with heater. Heaters have two circuits for 3-heat operation; by connecting the two circuits in series, 115-volt heaters can be operated on 230 volts for single-heat (2 circuits in series).



SINGLE BLADE HEATERS—Type MB-1

Shipment from Stock

Catalog Number	Watts 3-heats ¼-½-or full	Volts Specify 115 or 230	Overall Length Inches B	Price Each
FOR WATER HEATING—COPPER SHEATH				
MB-1100	1000	Specify	13	**$22.20**
MB-1125	1250	115 or 230	16¼	**23.05**
MB-1150	1500	"	18⅞	**24.20**
MB-1200	2000	"	23½	**25.90**
MB-1250	2500	"	28½	**27.65**
MB-1300	3000	"	33½	**29.45**
MB-1400	4000	230 Only	42½	**32.75**

TWO BLADE HEATERS—Type MB-2

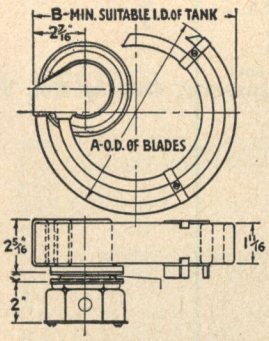
Shipment One Week

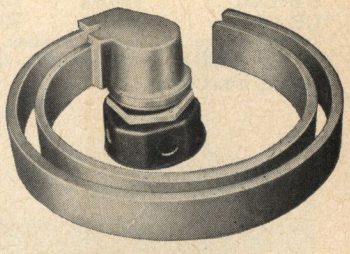
Catalog Number	Watts 3-heats ¼-½-or full	Volts Specify 115 or 230	Overall Length Inches B	Price Each
FOR WATER HEATING—COPPER SHEATH				
MB-2200	2000	Specify	13	**$27.80**
MB-2250	2500	115 or 230	16¼	**30.25**
MB-2300	3000	"	18⅞	**32.40**
MB-2400	4000	"	23½	**36.60**
MB-2500	5000	"	28½	**40.50**
MB-2600	6000	230 Only	33½	**43.50**
MB-2800	8000	"	42½	**46.80**

IMMERSION HEATERS—Type MCB-2

USES—For use in coffee or hot water urns and round tanks.

TO INSTALL—Cut 2 7/16" dia. hole in tank bottom (maximum thickness ⅜"), place heaters so terminals for electrical connections go through hole. Lock nut and gasket supplied with heater to make fitting watertight.





Type MCB-2

Type MCB-2 Heaters for Coffee & Water Urns, etc.

Shipment Approximately Two Weeks

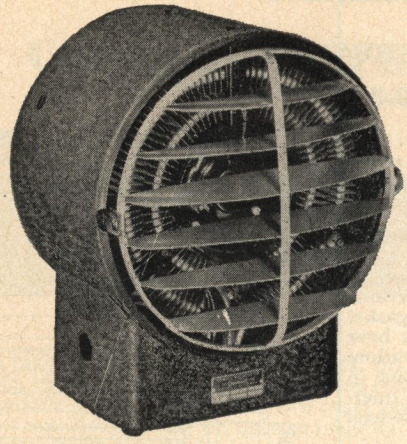
Catalog Number	Price Each	Watts 3-heats ¼-½-or full	Volts Specify 115 or 230	Outside Diameter of heater in inches	B Dim. Inches
FOR WATER HEATING—COPPER SHEATH					
***MCB-1101**	**$26.15**	1000	115 Only	9¼	10
MCB-2200	**33.95**	2000	115 or 230	9¼	10
MCB-2300	**34.15**	3000	"	9¼	10
MCB-2400	**38.60**	4000	"	11¼	12
MCB-2500	**42.50**	5000	"	12½	13
MCB-2600	**45.25**	6000	230 Only	14¼	15

*Single blade—three heat.

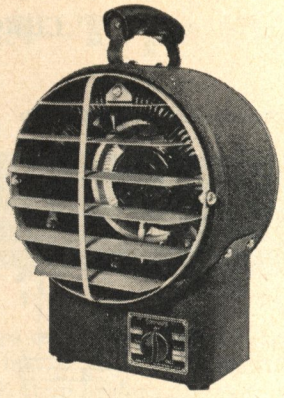
3-HEAT OPERATION—Type MCB-2 has two circuits for 3-heat operation. By connecting the two circuits in series, 115 volt heaters can be operated on 230 volts for single heat.

NOTE—When in operation blades must be completely immersed to prevent damage to heater.

CHROMALOX BLOWER-TYPE UNIT HEATERS—Type UB



5 to 20 kw. sizes inclusive



2 to 4 kw. sizes inclusive

USES—For forced air heating in office, factory or warehouse. Heaters may be used on floor or mounted on the wall or ceiling.

CONSTRUCTION—Chromalox Koilfin elements are installed in a cylindrical heavy gage metal housing. The blower motor, mounted in the center of the heater assembly, is protected by a baffle and cooled by the fan. Attractive brown wrinkle finish, aluminum painted grille on back and louvres on front. Louvres can be tilted to direct air up or down. Rubber feet minimize vibration.

UBC heaters are designed for wall and ceiling mounting; UBF heaters are for use on floor. Specify wall or ceiling brackets when required.

PROTECTION AGAINST OVERHEATING — A thermal cutout opens heater circuit if normal operating temperatures are exceeded. Reset button on the side of the base is pushed to close heater circuit when normal temperature is restored.

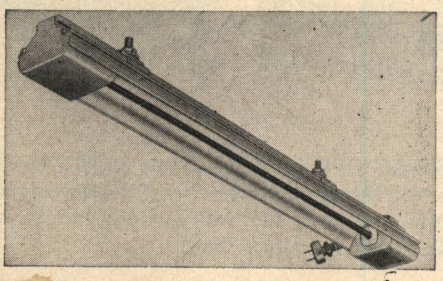
460-VOLT HEATERS—Are supplied with 460-volt heater circuit and 115- or 230-volt single phase motor as standard. Where low voltage source is not available for motor, specify 230-volt single phase motor and 460-230-volt, 60 cycle step-down transformer.

PRICES AND STANDARD RATINGS

Catalog Number	Prices	Kw.	Single or 3-phase Heating Circuit	Volts Specify One See Note	BTU per Hour	Overall Width	Overall Height	Overall Depth	Net Wgt. Lbs. Approx.
UB-22	$ 67.05	2	1 Only	115 or 230	6824	10⅜	13½	9½	19
UB-30	76.70	3	"	"	10236	10⅜	13½	9½	21
UBF-501	93.85	5	1 or 3-phase	230 or 460	17060	13 13/32	17 13/32	16⅜	54
UBC-501	93.85	5	"	"	17060	13 13/32	17 13/32	16⅜	54
UBF-751	134.40	7.5	"	230 or 460	25590	13 13/32	17 13/32	16⅜	54
UBC-751	134.40	7.5	"	"	25590	13 13/32	17 13/32	16⅜	54
UB-1001	155.35	10	"	"	34120	17 1/16	20⅞	20⅝	75
UB-1251	177.15	12.5	"	"	42650	17 1/16	20⅞	20⅝	75
UB-1501	196.55	15	"	"	51180	17 1/16	20⅞	20⅝	75
***UB-2001**	238.10	20	"	"	68240	17 1/16	20⅞	20⅝	79

* 230 volt rating available in 3 phase only.

WHEN ORDERING Specify Quantity, Catalog No., Volts, Kw., Phase, Air Heater, Fan Motor Voltage, plus Special Features.



CHROMALOX RADIANT COMFORT HEATERS—Type KR

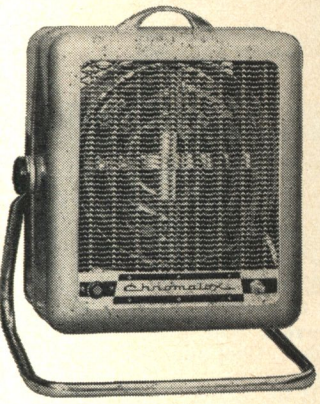
USES—Provides radiant heat comfort to workers in hard-to-heat open factory areas without wasteful heating of surrounding air. One or more KR heaters can be mounted on a dolly for use as a portable heating unit. Prevents lost time due to numb fingers and feet, chills and colds.

CONSTRUCTION—Rugged, all-metal construction. Totally enclosed Chromolox tubular element and polished reflector in rigid, extruded aluminum housing. Two sliding mounting clamps supplied with each heater make mounting easy. Plugs into any 115- or 230-volt outlet.

Cat. No.	Prices Heater	Prices Grille	Volts	Watts	A Dimension	Heated Length
KR-2083	$28.25	$3.60	120	800	24½"	16⅝"
KR-2083	28.25	3.60	240	800	24½"	16⅝"
KR-3113	31.20	3.60	120	1100	30¾"	22¾"
KR-3113	31.20	3.60	240	1100	30¾"	22¾"
KR-4183	40.60	7.20	240	1800	46¾"	38 11/16"

When Ordering: Specify catalog number, volts, Comfort Radiant Heater (plus grille if desired). For variable heat, write factory for input controller information

Chromalox HI-FLOW PORTABLE ELECTRIC HEATERS



- Fully-enclosed, all-metal heating element is shockproof, breakproof and moisture-proof.
- Smooth running motor sturdily constructed for long maintenance-free life.
- Manual on-off switch, and protective overheat device.
- Tubular-chrome support stand allows directing of heated air stream.
- Support-stand swivels to form wall or ceiling mounting.
- Baked-on Mediterranean-Blue paint-lock finish for durability and beauty.
- Requires minimum space, measuring only 15″ high by 14½″ wide and 9″ deep.

The Chromalox Hi-Flow Portable Heater is designed to operate in many positions. Compact, functional designing packs a tremendous heating capacity into a small, space-saving unit—ideal for shops, homes and store areas where space is at a premium. A rugged yet precision heating device which will automatically deliver or maintain any desired heat level. No bulky installation. A flick of a switch brings a surge of gently forced warm-air which quickly spreads and circulates throughout the room. Optional wall-mounted thermostat controls for completely automatic duty are available in several styles — both line-voltage types and low-voltage types.

SPECIFICATIONS AND PRICES

Cat. No.	Price	Rating Volts	Watts	Output B.T.U. per hour
CHF-120	**$53.50**	**120 A.C.**	2000	6824
CHF-220	**53.50**	**240 A.C.**	2000	6824
CHF-230	**59.50**	**240 A.C.**	3000	10236
CHF-240	**69.50**	**240 A.C.**	4000	18648

All models supplied with 5½ foot, UL listed cord and polarized plug.
Separate polarized wall outlet recommended.
Prices include Federal Excise Tax.

CHROMALOX DELUXE

An unusually efficient small portable unit heater for home, office and factory use. The heat source is a long-life tubular element similar to the Chromalox Supreme range unit used in many leading makes of electric ranges. Air is forced briskly over the glowing unit by a fan driven by a quiet, shielded motor.

Typical Chromalox quality in every detail—rugged heating element; sturdy heavy-gage metal case; wear-resistant and attractive gray hammertone finish make this heater a dependable performer for many places in home or industry.

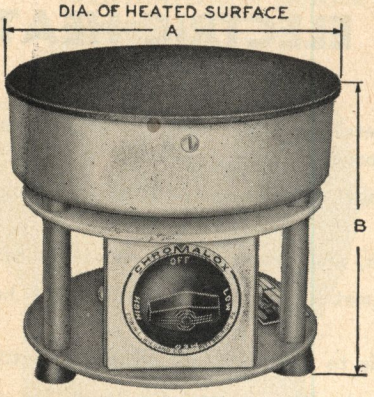
Light in weight — only 7¼ pounds—it can be easily carried about and plugged into any 115-120 volt A.C., 60-cycle outlet. Switch is conveniently located on top. This heater is equipped with 6 feet of Underwriters' Laboratories approved cord and plug.

DIMENSIONS: 11⅛″ high by 8⅝″ wide by 8″ deep.
Listed by Underwriters' Laboratories. Reference No. E-7061.
CATALOG NO. HF-50.
RATING: 120 volts A.C., 1500 watts.
CATALOG NO. HF-51.
RATING: 120 volts A.C., 1320 watts.
PRICE: $19.50 including Federal Excise Tax.
Carried in stock for immediate shipment.
WHEN ORDERING Specify Quantity, Catalog No., Volts, Watts, Air Heater.

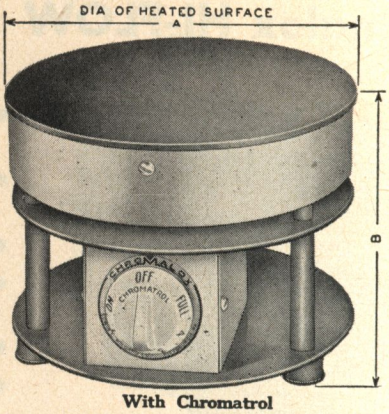


Chromalox Deluxe Type HF-50, 51

CHROMALOX LABORATORY HOT PLATES - Type ROPH



With 3-Heat Switch



With Chromatrol

CONSTRUCTION—Chromalox design with the resistor embedded in refractory in recesses or channels in bottom of special alloy top plate. Sturdy supporting frame with heat baffles—totally enclosed switch mounted on base. Molded plastic feet. All sizes furnished with 6-feet cord and plug.

ADVANTAGES—Especially designed for efficient, continuous, heavy-duty, laboratory work. For heating beakers and pans, heat treatments, evaporations, dehydrations and many other laboratorv heating problems.

No warping—unusually long life—uniform surface temperature—baffles prevent feet getting hot, permitting use on wood tables. Cool operation of switch assures safe and easy handling.

THREE-HEAT SWITCH on ROPH Hot Plates provides low, medium or high temperatures as shown in the table below. ROPH Hot Plates with 3-heat switch listed by Underwriters' Laboratories, Reference E-14917.

CHROMATROL equipped ROPH Hot Plates have the advantage of infinite control of first 50% of total wattage thus permitting accurate temperature control for laboratory use.

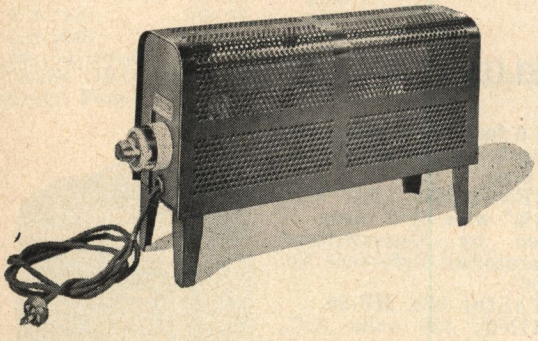
PRICES, SIZES AND STANDARD RATINGS for 120 and 240 Volts

With *3-Heat Switch Catalog Number	List Price	With *Chromatrol Catalog Number	List Price	Watts	Dimensions Inches 3-Heat Switch A	3-Heat Switch B	Chromatrol A	Chromatrol B	Approx. Max. Surface Temp. °F. Chromatrol†	Three-Heat Switch High	Med.	Low	Approx. Net Weight Lbs.
ROPH-61	$18.70	ROPH-6	$29.85	660	7 1/32	7 3/16	7	5 7/8	Infinite	700	500	350	6 1/2
ROPH-101	20.50	ROPH-10	31.70	1000	7 1/32	7 3/16	7	5 7/8	temperature	900	625	435	6 1/2
ROPH-121	20.50	ROPH-12	31.70	1200	7 1/32	7 3/16	7	5 7/8	control	970	695	495	6 1/2
ROPH-151	25.65	ROPH-15	36.70	1500	8 7/16	9	8 1/2	6 3/8	for first	940	670	480	10
ROPH-201	25.65	ROPH-20	36.70	2000	8 7/16	9	8 1/2	6 3/8	50% of total wattage	1000	800	600	10

*Can be operated on AC only. †High heat temperature same as with three heat switch.

WHEN ORDERING Specify Quantity, Cat. No., Volts, Watts, Hot Plate with Three-Heat Switch or Chromatrol.

CHROMALOX ELECTRIC AIR HEATER - Type D with 3-Heat Switch



For small offices or shops, for any of the dozens of everyday places that require comfortable warmth where people are working, these inexpensive Type D air heaters come to the front. Their simple construction makes them light, yet sturdy and easy to move to the next room or space to be heated.

The 1000-watt and 1500-watt heaters are supplied complete with 3-heat switch, 6 feet of heater cord and attachment plug. The two larger sizes of heaters are furnished with 3-heat switch and 6 feet of heater cord for connection to power line.

Type D

PRICES AND RATINGS for 115, 230, 250 and 460 Volts

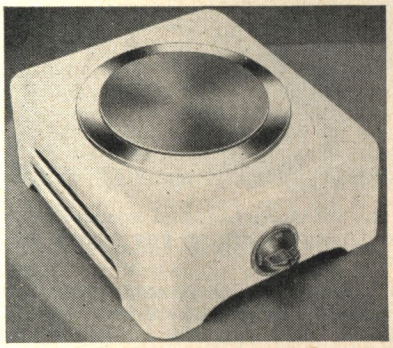
Carried in Stock FOR IMMEDIATE SHIPMENT

Catalog Number	Overall Length Inches	Overall Width Inches	Overall Height Inches	Aprox. Shipping Weight Pounds	Wattage	Price
EH-810	22	6	13	33	1000	$26.20
EH-815	22	6	13	33	1500	30.25
EH-420	28	6	13	38	2000	34.20
EH-430	28	6	13	38	3000	41.50

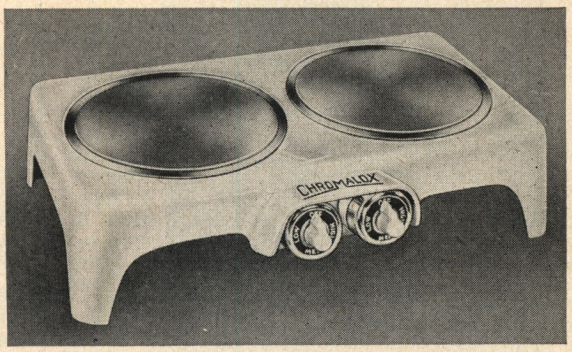
EDWIN L. WIEGAND COMPANY

Chromalox "SHORT-ORDER" HOT PLATES

Equipped with Chromalox Heatflo Range Units for 115 or 230 Volts—3-Heat Operation



Type SHM



Type THB

USES—Wherever quick-heating hot plates are needed for "short-order" cooking or other fast-heating purposes, these hot plates are ideal equipment: Grills, Diet Kitchens, Clubs, Lunch Rooms, Tea Rooms, Sandwich Shops, Barbecues, Soda Fountains, Cafeterias, Wayside Stands, Coffee Shops, Domestic Science Departments, Kitchens in Schools, etc.

CONSTRUCTION—Strong and sturdy. Built to withstand everyday use. Frame is of heavy durable cast iron, with white enameled finish. Sanitary and easy to keep clean.

HEATING UNITS—Chromalox Heatflo units provide an even distribution of heat. Alloy in top of unit will not warp, crack or buckle. Heating coils are imbedded in a finely ground, highly compacted refractory which is in direct thermal contact with the underside of the heating unit.

ADVANTAGES—Chromalox Heatflo range units possess many outstanding advantages:

1. ALL-OVER METAL TO METAL CONTACT with bottom of the cooking utensil. Heat is transmitted by conduction, the quickest and most effective way.
2. ATTRACTIVE APPEARANCE. These units are "a thing of beauty" and remain so.
3. EASILY CLEANED—a simple wiping off does the trick—no grooves or channels.
4. UNHARMED BY "SPILL-OVERS"—nothing can touch the heating wires and it is easy to keep the smooth flat top from getting "gummed up."
5. UNHARMED BY KITCHEN "ACCIDENTS"—sudden jolts or jars are harmless because the heating wires are embedded in a refractory.
6. UNUSUAL DURABILITY. The patented Chromalox construction assures long-lived units and protects against loss of heating efficiency.

STANDARD PRICES AND RATINGS for 115 and 230 Volts

Carried in stock FOR IMMEDIATE SHIPMENT

SINGLE UNIT TYPE SHM

Dimensions: Height 5⅛", Width 11¼", Depth 13⅝" (including switch). Approx. Net Weight 12 lbs., Shipping Weight 15 lbs.

Catalog Number	Price Each†	Volts* Specify 115 or 230	Wattage
SHM-1200	$23.55	115 or 230	1200
SHM-2000	25.90	115 or 230	2000

†Plus Federal Excise Tax of 5%.
*A.C. operation only. For D.C. operation, special switch is required.
Add $4.70 to above price for D.C. switch.

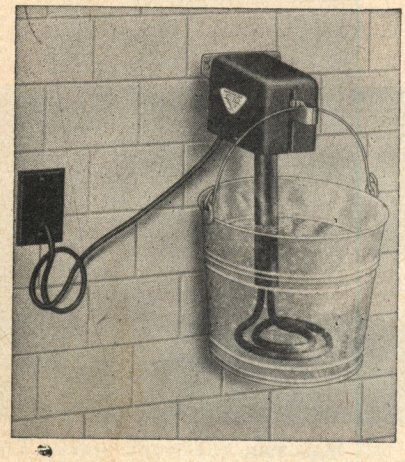
DOUBLE UNIT TYPE THB

Dimensions: Height 5½", Depth 14" (including switch), Length 21½". Approx. Net Weight 26 lbs., Shipping Weight 35 lbs.

Catalog Number	Price Each	Volts Specify 115 or 230 AC or DC	Wattage No. 1 Burner	Wattage No. 2 Burner	Total
THB-2400	$47.00	115 or 230	1200	1200	2400
THB-4000	51.60	115 or 230	2000	2000	4000

EDWIN L. WIEGAND CO.

CHROMALOX AUTOMATIC PAIL HEATER Type PH-15

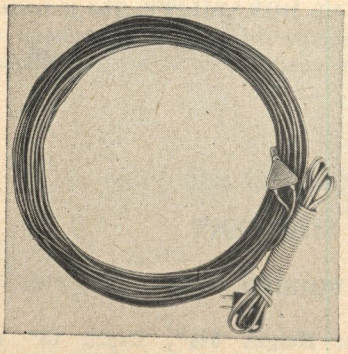


TYPE PH-15 AUTOMATIC PAIL HEATER

This model can be put to work wherever there's an electric outlet and a spot where two nails or screws can be driven 5 inches apart. The Chromalox Automatic Pail Heater turns on when the pail of water is placed on the switchhook . . . and switches itself off when the pail is removed. Current turns off if water is boiled off to within a few inches of the bottom of the element. Heater lifts easily from mounting for portable use. Listed by Underwriters' Laboratories.

120 volts, 1500 watts, copper sheathed Chromalox element, 6-foot rubber-covered cord and plug, ready to mount. **$18.95**

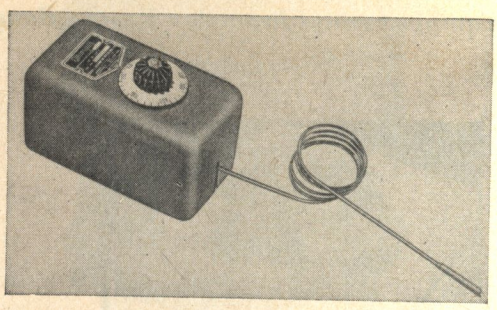
CHROMALOX THERMWIRE



Standard Chromalox Thermwire, designed for use on 115-volt A.C. or D.C. circuits, is rated at 400 watts. Additional sets can be plugged into the same circuit. The standard Thermwire set for 230-volt operation is rated at 800 watts. For special applications on 460-volt circuits, custom-built Thermwire sets are available.

Cat. No.	Price
TW-4 (80 ft. for 115 v. 400 w.)	$10.75
TW-8 (160 ft. for 230 v., 800 w.)	22.85

CHROMALOX THERMOSTAT Type AR



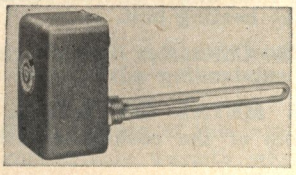
USES—Used to automatically and accurately maintain the desired temperature on any electrical heating application.

SELECTION — Select the thermostat covering the temperature range of the work, either 50° to 250°F. or 150° to 550°F. Use style No. 9 where sufficient space is available and style No. 4 in confined locations. The style No. 4 bulb is used in a straight length; style No. 9 can be coiled to a minimum inside radius of ⅜". When using the style No. 9 bulb in tanks specify a threaded fitting. If the solution is corrosive to the electro zinc plated copper bulb, a protective well must be used. For hazardous locations, a special housing may be provided.

PRICES AND STANDARD RATINGS

Cat. No.	Price	Temp. Range °F	Sensitive Bulb Style	Sensitive Bulb Dia. in.	Sensitive Bulb Lgth. in.
AR-2524	$22.05	50° to 250°	No. 4	¼	5½
AR-5524	22.05	150° to 550°	No. 4	¼	4¾
AR-2529	20.65	50° to 250°	No. 9	3/16	11¼
AR-5529	20.65	150° to 550°	No. 9	3/16	10

WHEN ORDERING Specify Quantity, Catalog No., Thermostat, Bulb Style, plus Special Features if required.



Type ARTM with Built-in Thermostat

Used in domestic hot water tanks, range boilers, coffee urns, or any tank where thermostatically controlled hot water is desired. Chromalox copper-sheathed tubular heater is brazed into a red brass screw plug along with a sealed brass well for the sensitive thermostat bulb. The thermostat is mounted directly on the screw plug, and has a range of 100°F. to 180°F.

PRICES AND STANDARD RATINGS

118 or 236 volts—Stock—**IMMEDIATE SHIPMENT**

Cat. No.	Price	Watts	Rating Volts (Specify One)	Dimensions Over-all Lgth. A	Dimensions Min. Tank I.D. B
ARTM-750	$18.20	750	118 or 236	11¾	7½
ARTM-1000	18.75	1000	"	11¾	7½
ARTM-1250	18.95	1250	"	13 3/16	9 1/16
ARTM-1500	19.15	1500	"	15⅝	11⅜

Approximate net weight . . . 3 lbs.

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ARTICLE 810

RADIO and TELEVISION EQUIPMENT

8101. Scope. This article shall apply to radio and television receiving equipment and to amateur radio transmitting equipment, but shall not apply to equipment and antennas used for coupling carrier current to power line conductors.

It is recommended that the authority enforcing this code be freely consulted as to the specific methods to be followed in any case of doubt relative to installation of antenna and counter-poise conductors and that the National Electrical Safety Code, Part 5, be followed.

8102. Application of Other Articles. Wiring from the source of power to and between devices connected to the interior wiring system shall comply with Chapters 1 to 4, inclusive, except as modified by sections 6403, 6404 and 6405. Wiring for radio-frequency and audio-frequency equipment and loud speakers shall comply with Article 640.

8103. Community Television Antenna. The antenna shall comply with the requirements of this article. The distribution system shall comply with Article 800.

Antenna Systems—General

8111. Material. Antenna, counter-poise and lead-in conductors shall be of hard copper, bronze, aluminum, alloy, copper-clad steel or other high-strength, corrosion-resistant material. Soft-drawn or medium-drawn copper may be used for lead-in conductors where the maximum span between points of support is less than 35 feet.

8112. Supports. Outdoor antenna and counter-poise and lead-in conductors shall be securely supported. They shall not be attached to poles or similar structures carrying electric light or power wires or trolley wires of more than 250 volts. Insulators supporting the antenna or counter-poise conductors shall have sufficient mechanical strength to safely support the conductors. Lead-in conductors shall be securely attached to the antenna.

8113. Avoidance of Contacts with Conductors of Other Systems. Outdoor antenna, counter-poise and lead-in conductors from an antenna to a building shall not cross over electric light or power circuits and shall be kept well away from all such circuits so as to avoid the possibility of accidental contact. Where proximity to electric light and power service conductors of less than 250 volts cannot be avoided, the installation shall be such as to provide a clearance of at least two feet. It is recommended that antenna and counter-poise conductors be so installed as not to cross under electric light or power conductors.

8114. Splices. Splices and joints in antenna and counter-poise span shall be made with approved splicing devices or by such other means as will not appreciably weaken the conductors.

Soldering may ordinarily be expected to weaken the conductor. Therefore, when soldering is employed it should be independent of the mechanical support.

8115. Structures. Metal structures supporting antennas shall be permanently and effectively grounded.

Antenna Systems—Receiving Station

8121. Size of Wire-Strung Antenna and Counter-poise.

a. Outdoor antenna and counter-poise conductors for receiving stations shall be of a size not less than given in the following table:

Material	Minimum Size of Conductors When Maximum Open Span Length Is Less than 35 feet	35 feet to 150 feet	Over 150 feet
Aluminum alloy, hard-drawn copper	19	14	12
Copper-clad steel, bronze or other high strength material	20	17	14

For very long span lengths larger conductors will be required, depending on the length of the span and the ice and wind loading.

b. Self-Supporting Antennas. Outdoor antennas, such as vertical rods or dipole structures, shall be of non-corrodible materials and of strength suitable to withstand ice and wind loading conditions, and shall be located well away from overhead conductors of electric light and power circuits of over 150 volts to ground so as to avoid the possibility of the antenna or structure falling into or accidental contact with such circuits.

8122. Size of Lead-In. Lead-in conductors from outside antenna, and counter-poise for receiving stations, shall, for various maximum open span lengths, be of such size as to have a tensile strength at least as great as that of the conductors for antenna as specified in section 8121. When the lead-in consists of two or more conductors which are twisted together or are enclosed in the same covering or are concentric, the conductor size shall, for various maximum open span lengths, be such that the tensile strength of the combination will be at least as great as that of the conductors for antenna as specified in section 8121.

8123. Clearances.

a. On Buildings Outside. Lead-in conductors attached to buildings shall be so installed that they cannot swing closer than two feet to the conductors of circuits of 250 volts or less or ten feet to the conductors of circuits of more than 250 volts, except that in the case of circuits not exceeding 150 volts, if all conductors involved are supported so as to insure permanent separation, the clearance may be reduced but shall not be less than four inches. The clearance between lead-in conductors and any conductor forming a part of a lightning rod system shall be not less than six feet unless the bonding referred to in section 2586 is accomplished.

b. Antennas and Lead-Ins—Indoors. Indoor antennas and indoor lead-ins shall not be run nearer than two inches to conductors of other wiring systems in the premises unless

(1) such other conductors are in metal raceways or cable armor, or
(2) unless permanently separated from such other conductors by a continuous and firmly fixed non-conductor such as porcelain tubes or flexible tubing.

8124. Electric Supply Circuits Used in Lieu of Antenna. If an electric supply circuit is used in lieu of an antenna, the device by which the radio receiving set is connected to the supply circuit shall be specially approved for the purpose.

Antenna System—Transmitting Stations

8131. Size of Antenna. Antenna and counter-poise conductors for transmitting stations shall be of a size not less than given in the following table:

Material	Minimum Size of Conductors When Maximum Open Span Length Is Less than 150 feet	Over 150 feet
Hard-drawn copper	14	10
Copper-clad steel, bronze or other high strength material	14	12

For very long span length larger conductors will be required, depending on the span length and the ice and wind loading.

USEFUL INFORMATION (Continued)

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ARTICLE 810

RADIO and TELEVISION EQUIPMENT

8132. Size of Lead-In Conductors. Lead-in conductors for transmitting stations shall, for various maximum span lengths, be of a size at least as great as that of conductors for antenna as specified in Section 8151.

8133. Clearance on Building. Antenna and counter-poise conductors for transmitting stations, attached to buildings, shall be firmly mounted at least 3 inches clear of the surface of the building on non-absorptive insulating supports, such as treated pins or brackets, equipped with insulators having not less than 3-inch creepage and air-gap distances. Lead-in conductors attached to buildings shall also conform to these requirements, except when they are enclosed in a continuous metallic shield which is permanently and effectively grounded. In this latter case the metallic shield may also be used as a conductor.

8134. Entrance to Building. Except where protected with a continuous metallic shield which is permanently and effectively grounded, lead-in conductors for transmitting stations shall enter buildings by one of the following methods:

a. Through a rigid, non-combustible, non-absorptive insulating tube or bushing.

b. Through an opening provided for the purpose in which the entrance conductors are firmly secured so as to provide a clearance of at least 2 inches.

c. Through a drilled window pane.

8135. Protection Against Accidental Contact. Lead-in conductors to radio transmitters shall be so located or installed as to make accidental contact with them difficult.

Protectors

8141. Lightning Arresters — Receiving Stations. Each conductor of a lead-in from an outdoor antenna shall be provided with a lightning arrester approved for the purpose, except that if the lead-in conductors are enclosed in a continuous metallic shield the lightning arrester may be installed to protect the shield or may be omitted if the shield is permanently and effectively grounded. Lightning arresters shall be located outside the building, or inside the building between the point of entrance of the lead-in and the radio set or transformers, and as near as practicable to the entrance of the conductors to the building. The lightning arrester shall not be located near combustible material nor in a hazardous location.

8142. Lightning Arresters — Transmitting Stations. Except where protected by a continuous metallic shield which is permanently and effectively grounded, or the antenna is permanently and effectively grounded, each conductor of a lead-in for outdoor antenna shall be provided with a lightning arrester or other suitable means which will drain static charges from the antenna system.

Grounding Conductors—General

8151. Material. The grounding conductor shall, unless otherwise specified, be of copper, aluminum, copper-clad steel, bronze, or other corrosion-resistant material.

8152. Insulation. The grounding conductors may be uninsulated.

8153. Supports. The grounding conductors shall be securely fastened in place and may be directly attached to the surface wired over without the use of insulating supports. When proper support cannot be provided the size of the grounding conductor shall be increased proportionately.

8154. Mechanical Protection. The grounding conductor shall be protected where exposed to mechanical injury or the size of the grounding conductor shall be increased proportionately to compensate for the lack of protection.

8155. Run in Straight Line. The grounding conductor shall be run in as straight a line as practicable from the antenna mast and/or lightning arrester to the grounding electrode.

8156. Grounding Electrode. The grounding conductor shall be connected to a metallic underground water piping system as specified in section 2581. If the building is not supplied with a water system the connection shall be made to the metal frame of the building if effectively grounded or to a grounding electrode as specified in section 2583. At a penthouse or similar location the ground conductor may be connected to a water pipe or rigid conduit.

Grounding Conductors—Receiving Stations

8161. Inside or Outside Building. The grounding conductor may be run either inside or outside the building.

8162. Size of Protective Ground. The protective grounding conductor for receiving stations shall be not smaller than No. 14 copper or No. 12 aluminum or No. 17 copper-clad steel or bronze, provided that where wholly inside the building it shall not be smaller than No. 18.

8163. Common Ground. A single grounding conductor may be used for both protective and operating purposes.

If a single conductor is so used, the ground terminal of the equipment should be connected to the ground terminal of the protective device.

Grounding Conductors—Transmitting Stations

8171. Size of Protective Ground. The protective ground conductor for transmitting stations shall be as large as the lead-in, but not smaller than No. 14 copper, bronze, or copper-clad steel.

8172. Size of Operating Grounding Conductor. The operating grounding conductor for transmitting stations shall be not less than No. 14 copper or its equivalent.

Interior Installation—General

8181. Radio Noise Suppressors. Radio interference eliminators, interference capacitors or radio noise suppressors connected to power supply leads shall be of a type approved for the purpose. They shall not be exposed to mechanical injury.

Transmitting Stations

8191. Clearance From Other Conductors. Except as provided in Article 640, all conductors inside the building shall be separated at least 4 inches from the conductors of any other light or signal circuit unless separated therefrom by conduit or some firmly fixed non-conductor such as porcelain tubes or flexible tubing.

8192. General. Transmitters shall comply with the following:

a. Enclosing. The transmitter shall be enclosed in a metal frame or grille, or separated from the operating space by a barrier or other equivalent means, all metallic parts of which are effectually connected to ground.

b. Grounding of Controls. All external metallic handles and controls accessible to the operating personnel shall be effectually grounded.

No circuit in excess of 150 volts should have any parts exposed to direct contact. A complete dead-front type of switchboard is preferred.

c. Interlocks on Doors. All access doors shall be provided with interlocks which will disconnect all voltages in excess of 350 volts when any access door is opened.

d. Audio-Amplifiers. Audio-amplifiers which are located outside the transmitter housing shall be suitably housed and shall be so located as to be readily accessible and adequately ventilated.

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ARTICLE 422

APPLIANCES

Stationary • Portable • Motor Driven • Heating
Fixed Electrical Space Heating

4221. Scope. This article shall apply to electric appliances used in any occupancy.

4222. Branch Circuit Requirements. Every appliance shall be supplied by a branch circuit of one of the types specified in Article 210. Motor-operated appliances shall also conform to the requirements of Article 430.

See Table 29 of Chapter 10 for the conductors of a household range branch circuit.

Installation of Appliances

4231. Insulation of Cords. Flexible cords used to connect heating appliances shall comply with the following:

a. Appliances Requiring Heater Cords. Flexible cords used to connect smoothing irons, or to connect portable electrically-heated appliances rated at more than 50 watts and which produce temperatures in excess of 121C (250F) on surfaces with which the cord is liable to be in contact, shall be one of the types of approved heater cords listed in Table 31, Chapter 10.

b. Other Heating Appliances. All other portable electrically-heated appliances shall be connected by one of the approved types of cord listed in Table 31, Chapter 10, selected in accordance with the usage specified in that table.

4232. Insulation of Appliances. Portable appliances shall be provided with an adequate dielectric interposed between current-carrying parts and those external surfaces which persons can touch, except for toasters, grills or other heating appliances in which the current-carrying parts at high temperature are necessarily exposed. In locations where the dielectric is exposed to mechanical injury, it shall be suitably protected.

4233. Portable Immersion Heaters. Electric heaters of the portable immersion type shall be so constructed and installed that current-carrying parts are effectively insulated from electrical contact with the substance in which immersed. The authority enforcing this code may make exception of special applications of apparatus where suitable precautionary measures are followed.

4234. Protection of Combustible Material. Each electrically-heated appliance that is obviously intended by size, weight and service to be located in a fixed position shall be so placed as to provide ample protection between the appliance and adjacent combustible material.

4235. Stands for Portable Appliances. Each smoothing iron and other portable electrically-heated appliance which is intended to be applied to combustible material shall be equipped with an approved stand, which may be a separate piece of equipment or may be a part of the appliance.

4236. Signals for Heated Appliances. In other than residence occupancies, each electrically-heated appliance, or group of electrically-heated appliances, intended to be applied to combustible material, shall be installed in connection with a signal unless the appliance is provided with an integral temperature-limiting device.

4237. Infra-Red Lamp Industrial Heating Appliances. Infra-red heating lamps rated at 300 watts or less may be used with lampholders of the medium-base unswitched porcelain type, or other types approved for the purpose. Screw-shell lampholders shall not be used with infra-red lamps over 300 watts rating unless the lampholders are especially approved for the purpose. These lampholders may be connected to any of the branch circuits of Article 210 and, in industrial occupancies, may be operated in series on circuits of more than 150 volts to ground provided the voltage rating of the lampholders is not less than the circuit voltage.

Each section, panel or strip carrying a number of infra-red lampholders (including the internal wiring of such section, panel or strip) is considered an appliance. The terminal connection block of each such assembly is deemed an individual outlet.

4238. Grounding. Metal frames of portable and stationary electrically-heated appliances, operating on circuits above 150 volts to ground, shall be grounded in the manner specified in Article 250; provided, however, that where this is impracticable, grounding may be omitted by special permission, in which case the frames shall be permanently and effectively insulated from the ground.

It is recommended that the frames be grounded in all cases. For methods of grounding frames of electric ranges and clothes dryers, see sections 2557 and 2560.

Control and Protection of Appliances

4241. Disconnecting Means. Each appliance shall be provided with a means for disconnection from all ungrounded conductors as follows:

a. Portable Appliances. For portable appliances (including household ranges and clothes dryers) a separable connector or an attachment plug and receptacle may serve as the disconnecting means. The rating of a receptacle or of a separable connector shall not be less than the rating of any appliance connected thereto, except that demand factors authorized elsewhere in this code may be applied. Attachment plug caps and connectors shall conform to the following:

1. **Live Parts.** They shall be so constructed and installed as to guard against inadvertent contact with live parts.
2. **Interrupting Capacity.** They shall be capable of interrupting their rated current without hazard to the operator.
3. **Interchangeability.** They shall be so designed that they will not fit into receptables of lesser rating.

For household electric ranges, a plug and receptacle connection at the rear base of a range, if it is accessible from the front by removal of a drawer, is considered as meeting the intent of this rule.

b. Stationary Appliances. For stationary appliances rated at not over 300 volt amperes or ⅛ horsepower, the branch-circuit overcurrent device may serve as the disconnecting means. For stationary appliances of greater rating the branch-circuit switch or circuit-breaker may, if readily accessible to the user of the appliance, serve as the disconnecting means.

c. Unit Switches. Switches which are a part of an appliance shall not be considered as taking the place of the single disconnecting means required by this section unless there are other means for disconnection as follows:

1. **Multi-Family Dwellings.** In multi-family (more than two) dwellings, the disconnecting means shall be within the apartment, or on the same floor as the apartment in which the appliance is installed, and may control lamps and other appliances.
2. **Two-Family Dwellings.** In two-family dwellings, the disconnecting means may be outside of the apartment in which the appliance is installed. This will permit an individual switch for the apartment to be used.
3. **Single-Family Dwellings.** In single-family dwellings, the service disconnecting means may be used.
4. **Other Occupancies.** In other occupancies, the branch-circuit switch or circuit-breaker, if readily accessible to the user of the appliance, may be used for this purpose.

d. Switch or Circuit-Breaker to Be Indicating. Switches or circuit-breakers used as disconnecting means shall be of the indicating type.

USEFUL INFORMATION (Continued)

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ARTICLE 422

ELECTRICAL HEATING

Special Provisions For Fixed Electrical Space Heating

4271. General. Equipment for use with electrical space heating systems shall be of a type approved for such service.

In addition to complying with the general requirements for appliances, such equipment shall comply with sections 4271 to 4286 inclusive.

The special provisions of this Article shall apply to electrically energized units, panels and cables for space heating. They shall also include central heating systems employing electrical heating units.

Electrical space heating systems employing methods of installation other than covered by sections 4271 to 4286 inclusive may be used only by special permission.

4272. Use. Space heating systems shall not be used

(1) where exposed to severe mechanical injury unless adequately protected.

(2) in wet or damp locations unless specially approved for the purpose.

See also rules on Corrosive Conditions, Section 3102 b and c.

4273. Temperature Limitations. The operating temperature of room surfaces where embedded elements and panels are used shall not exceed 66°C. (150°F.). (Based on room temperature of 30°C., 86°F.)

4274. Appliances to be Complete Units. Panels and cables shall be installed in their complete sizes or lengths as supplied by the manufacturer. Units which are shortened or from which the marking labels or nameplates are missing shall not be installed. Units shall be suitable for use with approved wiring systems.

4275. Construction. Heating cables shall be furnished complete with factory-assembled non-heating leads at least 7 feet in length, and the leads shall consist of conductors and wiring approved for general use.

4276. Marking of Heating Cables. Each unit length of heating cable shall have a permanent marking located within 3 inches of the terminal end of the non-heating leads, and shall be legibly marked with the manufacturer's name or identification symbol, catalog number, and rating in volts and watts or amperes.

The lead wires shall have the following color identifications; 230 volts nominal—red, 115 volts nominal—yellow.

4277. Controllers and Disconnecting Means.

a. Thermostats and thermostatically controlled switching devices which indicate an "off" position and which interrupt line current, shall open (simultaneously) all ungrounded conductors in the "off" position regardless of temperature.

c. Switching devices consisting of combined thermostats and manually controlled switches which serve both as controllers and disconnecting means:

(1) shall open regardless of temperatures all ungrounded conductors when manually placed in the "off" position and

(2) shall be so designed that the circuit cannot be energized automatically after the device has been manually placed in the "off" position.

4278. Clearances of Wiring in Ceilings.

a. Wiring located above heated ceilings and within thermal insulation shall be spaced not less than 2 inches above the heated ceiling and shall be considered as operating at an ambient of 50° C. The current carrying capacities of conductors shall be computed on the basis of the correction factor given in Table 1, Chapter 10.

b. Wiring located above heated ceilings and over thermal insulation having a minimum thickness of 2 inches requires no correction for temperature.

c. Wiring located above heated ceilings and within a joist space having no thermal insulation shall be spaced not less than two inches above the ceiling and shall be considered as operating at an ambient of 50° C. The current carrying capacities of conductors shall be computed on the basis of the correction factor given in Table 1, Chapter 10.

4279. Clearances of Wiring in Walls.

a. Where located in exterior walls, wiring shall be located outside the thermal insulation.

b. Where located in interior walls or partitions, wiring shall be located away from the heated surfaces, and the wiring shall be considered as operating at an ambient of 40°C. (104°F.); and the current carrying capacities of conductors shall be computed on the basis of the correction factors of Table I, Chapter 10.

4280. Confinement in One Room. Panels shall not extend beyond the room in which they originate. Cables shall not be installed in closets, over cabinets which extend to the ceiling, under walls or partitions or over walls or partitions which extend to the ceiling, except that single runs of cable may pass over partitions where embedded. This requirement shall not prohibit low-temperature heat sources in closets to control relative humidity.

4281. Clearance from other objects and openings. Panels and cables shall be separated at least 8 inches from lighting fixtures, outlet and junction boxes, and 2 inches from ventilating openings and other such openings in room surfaces, or sufficient area shall be provided to assure that no heating cables or panels will be covered by surface mounted lighting units.

4282. Splices. Embedded cables may be spliced only where necessary and only by approved means, and in no case shall the length of the heating cable be altered.

4283. Installations of Heating Cables in Plaster.

a. Cables shall not be installed in walls.

b. Adjacent runs of cable not exceeding 2¾ watts per foot shall be installed not less than 1½ inches on centers.

c. Heating cables may be applied only to gypsum board, plaster lath and similar fire-resistant materials. With metal lath or other conducting surfaces, a coat of plaster (brown or scratch coat) shall be applied to completely cover the metal lath or conducting surface before the cable is attached.

d. The entire ceiling surface shall have a finish of thermally non-insulating plaster or of other approved sand, plaster or other approved non-insulating material having a nominal thickness of ½-inch.

e. Cables shall be secured at intervals not exceeding 16 inches by means of approved stapling, tape, plaster or other approved means. Staples or metal fasteners which straddle the cable shall not be used with metal lath or other conducting surface.

f. Cables shall be kept free from contact with metal or conducting surfaces.

NOTE: Complete copies of the 1956 NATIONAL ELECTRICAL CODE may be obtained by sending ONE DOLLAR to the National Fire Protection Association, 60 Batterymarch Street, Boston 10, Mass.

SECTION 6

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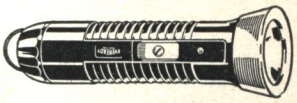
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EVEREADY

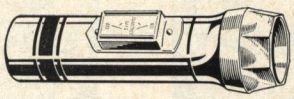
TRADE-MARK



No. 1251A 2-cell heavy-duty flashlight. Insulated case will not shatter, crack, or dent. Unbreakable Polyethylene safety-glow lens guard.

List price each, less batteries **$2.50**

Also available in 3-cell size No. 1351A.



5MF 2-cell Magnet Lite. Holds fast to steel. Ideal for use anywhere on automobiles and around the home.

List price, each, less batteries **$1.99**

EVEREADY BATTERIES



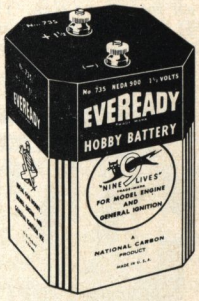
Cat. No.	No. Cells	Cell Sizes	Description	Size	Unit Pkg.	List Price Each
			UNIT CELLS			
912	1	AAA	Penlight Cell	1¾" x 0.4"	12	$0.125
915	1	AA	Penlight Cell	1 31/32" x 35/64"	12	.125
935	1	C	Baby Tubular	2" x 1 1/64"	12	.20
950	1	D	Regular	2 13/32" x 1 21/64"	48	.20
D99	1	D	Heavy Duty	2 13/32" x 1 21/64"	48	.25
			LANTERN			
509	4	F	Lantern	3 27/32" x 2⅝" x 2⅝"	12	.98

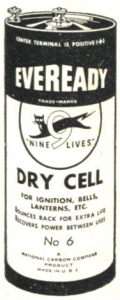


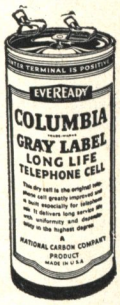


EMERGENCY LIGHTING TYPES

715	7½ Volts	Emergency Lighting	1	.....	$5.50
706	6 Volts	" "	1	.....	4.35
716	9 Volts	" "	1	.....	4.30
735	1½ Volts	General Purpose	12	.....	1.05







SIX INCH CELLS

Brand and Type	Volt-age	Overall Diameter Inches	Overall Height Inches	Approx. Weight of Standard Package Pounds	Quantity in Standard Package	List Price Each
"Eveready" "Ignitor" No. 6, Round	1½	2⅝	6⅝	27	12	$1.05
"Eveready" R. R. & Industrial	1½	2⅝	6⅝	27½	25	1.15
"Eveready" "Columbia" "Gray Label" Telephone Cell No. 6	1½	2⅝	6⅝	26¼	12	1.05

"HOT SHOT" BATTERIES

Brand and Type	Volt-age†	Overall Inches Length	Overall Inches Width	Overatll Inches Height	Approx. Weight of Std. Pkg. Pounds	Quantity in Std. Pkg.	List Price Each
"Eveready" No. 1461	6	10⅜	2¾	7¼	58¼	6	$4.35
"Eveready" No. 1462	6	5 5/16	5 5/16	7¼	39¼	4	4.35
"Eveready" No. 1562	7½	7⅞	5	7¼	50½	4	5.50
"Eveready" No. 1662	9	7 13/16	5¼	7¼	60¼	4	6.45





2LP



3LP

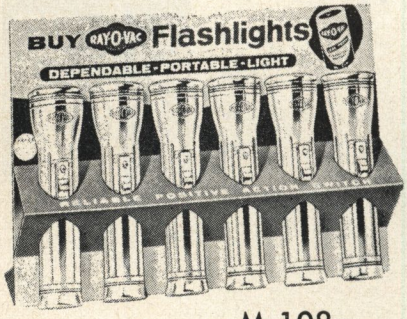
Size "D" Ray-O-Vac LEAK PROOF flashlight battery.

The 2LP is guaranteed against corrosion damage to the flashlight case. Patented sealed-in-steel construction keeps them fresh for years. The 2LP is packed in a colorful display package of 24.....48 to the unit package.

The sealed-in-steel construction is also available in the "C" size No. 1LP LEAK PROOF.....12 to the unit package.

Size "D" Ray-O-Vac LEAK PROOF industrial flashlight battery.

The Ray-O-Vac No. 3LP gives longer usable bright light and is guaranteed against corrosion damage to the flashlight case. It is fully sealed-in-steel; top, bottom and sides. It is not dated, no inventory risk. The Ray-O-Vac No. 3LP is packed in a unit package of 48.



M-108

The M-108 consists of six K22F on a display card within a dealer shipper. The K22F is a two-cell, chrome, regular, prefocused spotlight. It has a flat removable end cap and a three-position switch with signal button. Th K22F uses two No. 2LP size "D" batteries and bulb No. PR2. The K22F is also available in individual boxes.



M-110R

RAY-O-VAC FLASHLIGHTS AND BATTERIES

Ray-O-Vac 6 volt lantern battery. The No. 941 will out-perform all ordinary lantern batteries because of its exclusive Ray-O-Vac formula.

The No. 941 Ray-O-Vac 6 volt lantern battery has spiral spring terminals, and is available in standard package quantities of 12. Clip or screw terminal lantern batteries are available -- specify on order. These lantern batteries are also available individually.



941



M-220

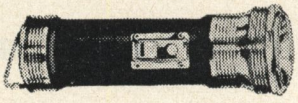
WORKMAN Display

The M-220 consists of three N22 heavy-duty nylon flashlights on a display card within a dealer shipper. The N22 is made of rugged, chemically resistant NYLON, with a removable end cap with nylon ring hanger. A spare lamp holder is provided within the end cap. The N22 features a replaceable switch to insure years of dependable service. The N22 WORKMAN is also available in individual boxes.

The M-111 consists of four S22F Ray-O-Vac SPORTSMAN spotlights with a display card in the dealer shipper. Each of the flashlights is packed in an individual carton. The S22F Ray-O-Vac SPORTSMAN has a chrome plated knurled barrel with a flat, removable end cap with ring hanger. It has a three-position switch with signal button. The S22F uses two No. 2LP size "D" flashlight batteries and bulb No. PR2.

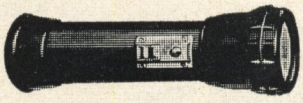


M-111



22FS

A focusing, two-cell, chrome and black spotlight. It has a flat, removable end cap with ring hanger. The 22FS uses two No. 2LP or 3LP size "D" flashlight batteries and bulb No. 14.



BR22

A lower priced heavy-duty flashlight with rubber end caps and a fibre barrel. It has a three-position switch with signal button. The BR22 uses two No. 2LP or 3LP size "D" flashlight batteries and bulb No. PR2.



N22

WORKMAN

The sensational new NYLON heavy-duty flashlight which is highly resistant to breakage, chemical action and extreme temperature ranges. The N22 features a space lamp holder in the removable end cap plus a nylon ring hanger and replaceable switch. See the listing on this page for all part numbers. The N22 uses two No. 2LP or 3LP size "D" flashlight batteries and bulb No. PR6. The N22 is also available three on a display card, Order No. M-220.

The M-110R consists of six Z21P Penlights on a display card within a dealer shipper. The Z21P is a two-cell, chrome, regular size Penlight with a patented rotary action switch. It uses two No. 7R "AA" size batteries and bulb No. 222. The Z21P is also available in individual boxes.

FUSETRON DUAL-ELEMENT FUSES

250 AND 600 VOLT



0 to 60 Amp.



70 to 600 Amp.

Fit regular fuse holders. A Fusetron dual-element fuse has a fuse link element to protect against short-circuits and a thermal cutout element to protect against overloads. It has tremendous time-lag and much less electrical resistance.

Highly desirable on all motor or lighting circuits. Long time-lag prevents blowing on harmless overloads or starting currents. Lower resistance means cooler operation and prevents damage to panelboards or switches from excessive heating.

Guard motors against burnout from single phasing or overloading, on normal installations, when used in motor protection sizes. At same time protect wiring against short-circuit.

Give double protection to motors already protected, if used in motor protection sizes in place of fuses for short-circuit protection.

Cut cost of new installations — permit use of smaller size panelboards and switches.

Carry Underwriters' Laboratories inspected label and are approved for both motor-running and circuit protection.

It pays to get all the facts about Fusetron Dual Element Fuses.

250 Volt				600 Volt		
Symbol and Amperes	Wt. Lbs. Per 100	Price Each	Carton	Symbol and Amperes	Wt. Lbs. Per 100	Price Each
FRN 1	3½	$0.33	10	FRS 1	14	$0.83
FRN 1¼	3½	.33	10	FRS 1¼	14	.83
FRN 1-6/10	3½	.33	10	FRS 1-6/10	14	.83
FRN 2	3½	.33	10	FRS 2	14	.83
FRN 2½	3½	.33	10	FRS 2½	14	.83
FRN 3-2/10	3½	.33	10	FRS 3-2/10	14	.83
FRN 4	3½	.33	10	FRS 4	14	.83
FRN 5	3½	.33	10	FRS 5	14	.83
FRN 6¼	3½	.33	10	FRS 6¼	14	.83
FRN 8	3½	.33	10	FRS 8	14	.83
FRN 10	3½	.33	10	FRS 10	14	.83
FRN 12	5	.33	10	FRS 12	16	.83
FRN 15	5	.33	10	FRS 15	16	.83
FRN 17½	5	.33	10	FRS	16	.83
FRN 20	5	.33	10	FRS 20	16	.83
FRN 25	5	.39	10	FRS 25	16	.94
FRN 30	5	.39	10	FRS 30	16	.94
FRN 35	12	.77	10	FRS 35	26	1.65
FRN 40	12	.77	10	FRS 40	26	1.65
FRN 45	12	.77	10	FRS 45	26	1.65
FRN 50	12	.77	10	FRS 50	26	1.65
FRN 60	12	.77	10	FRS 60	26	1.65
FRN 70	35	1.82	5	FRS 70	56	3.52
FRN 80	35	1.82	5	FRS 80	56	3.52
FRN 90	35	1.82	5	FRS 90	56	3.52
FRN 100	35	1.82	5	FRS 100	56	3.52
FRN 110	88	3.96	1	FRS 110	125	6.88
FRN 125	88	3.96	1	FRS 125	125	6.88
FRN 150	88	3.96	1	FRS 150	125	6.88
FRN 175	88	3.96	1	FRS 175	125	6.88
FRN 200	88	3.96	1	FRS 200	125	6.88
FRN 225	182	7.15	1	FRS 225	305	13.75
FRN 250	182	7.15	1	FRS 250	305	13.75
FRN 300	182	7.15	1	FRS 300	305	13.75
FRN 350	182	7.15	1	FRS 350	305	13.75
FRN 400	182	7.15	1	FRS 400	305	13.75
FRN 450	304	11.00	1	FRS 450	480	19.80
FRN 500	304	11.00	1	FRS 500	480	19.80
FRN 600	304	11.00	1	FRS 600	480	19.80

Many other sizes from 1/10 to 9 amperes can also be obtained at same price.

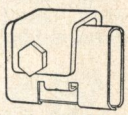
BUSS FUSE REDUCERS



Make it possible to use ordinary or Fusetron fuses of a size smaller than the fuse clips are intended to hold.

Fit in any panel or switch as reducers, take up no more space than would a fuse of a size to fit clips.

Poor contact troubles are entirely eliminated because these reducers provide clamp contact throughout.



200 to 100 amp
250 & 600 volt

Reducers fit any form of clip, either the spring type or clamp type.

Packed—one pair in a carton.

	No.	Lbs. per 100 Pair	List Price
250 VOLT			
60 to 30 amp.	263	16	$0.70
100 to 30 "	213	31	1.30
100 to 60 "	216	34	.95
200 to 60 "	226	60	2.90
200 to 100 "	2621	30	1.90
400 to 200 "	2642	35	2.90
600 VOLT			
60 to 30 "	663	16	.80
100 to 30 "	216	34	.95
100 to 60 "	616	39	1.70
200 to 60 "	626	65	4.75
200 to 100 "	2621	30	1.90
400 to 200 "	2642	35	2.90

600 to 400 amp. size reducer needed. 225 to 400 fuses will fit in 600 amp. clips—contact surface is reduced some but if necessary the effect of that can be offset by using clip clamps to give tighter contact.

BUSS CLIP-CLAMPS

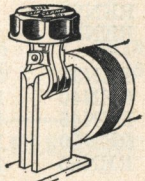
Insure Good Contact Between Clips and Ordinary or Fusetron Fuses



Prevent needless blowing of fuses by eliminating heating from poor contact that often causes fuses to blow.

Reduce needless destruction of fusecases by preventing poor contact from burning up the fibre tube and destroying the fuse. This usually makes a material cut in fuse bills.

Makes replacement of fuse-clips unnecessary. Generally permits even injured clips to be used with perfect satisfaction.



Built for hard service and to prevent corrosion, all steel parts are heavily cadmium plated.

Cat. No.	Size of Clamp	Carton Qty.	Wt. Lbs. Per 100
1	0- 30 amp. 250 volt	12	5
2	31- 60 amp. 250 volt 0- 30 amp. 600 volt	12	8
4	31- 60 amp. 600 volt	12	12
5	61-100 amp. 250 or 600 V.	12	10
6	101-200 amp. 250 or 600 V.	6	21
7	201-400 amp. 250 or 600 V.	6	31
8	401-600 amp. 250 or 600 V.	6	42

MIDGET TYPE FUSETRON DUAL ELEMENT FUSES

13/32 inch diameter 1½ inch long — Carton Quant. 10 — Lbs. per 100 1½ — Price Each $0.33

Symbol and Amperes	Symbol and Amperes	Symbol and Amperes	Symbol and Amperes	Symbol and Amperes
FNM 1/10	FNM 6/10	FNM 1-6/10	FNM 3-2/10	FNM 6¼
FNM 15/100	FNM 8/10	FNM 1-8/10	FNM 3½	FNM 7
FNM 2/10	FNM 1	FNM 2	FNM 4	FNM 8
FNM 3/10	FNM 1⅛	FNM 2¼	FNM 4½	FNM 9
FNM 4/10	FNM 1¼	FNM 2½	FNM 5	
FNM ½	FNM 1-4/10	FNM 2-8/10	FNM 5-6/10	FNM 10

BUSS SUPER-LAG RENEWABLE FUSES

N. E. C. Standard



3 to 60 Amperes



70 to 600 Amperes

Reduce to extent not possible with other renewable fuses, number of shutdowns caused by needless blows. Patent fuse-case and Super-Lag link make this possible. Save time and money and decrease out-of-service losses.

Costs often cut in half on new motor installations as Code (Paragraph 4346) in many cases permits smaller size fused safety switches, fuse panels or fuse blocks if Buss Super-Lag fuses are used.

Every Buss fuse carries inspection label of Underwriters' Laboratories.

250-Volt Fuses				600-Volt Fuses		
Symbols and Amperes	Wt. Lbs. Per 100	Price Each	Carton	Symbol and Amperes	Wt. Lbs. Per 100	Price Each
REN1	5.5	$.60	10	RES1	18	$1.48
REN2	5.5	.60	10	RES2	18	1.48
REN3	5.5	.60	10	RES3	18	1.48
REN 4	5.5	.60	10	RES4	18	1.48
REN5	5.5	.60	10	RES5	18	1.48
REN6	5.5	.557	10	RES6	18	1.39
REN10	5.5	.557	10	RES10	18	1.39
REN15	5.5	.557	10	RES15	18	1.39
REN20	5.5	.557	10	RES20	18	1.39
REN25	5.5	.557	10	RES25	18	1.39
REN30	5.5	.557	10	RES30	18	1.39
REN35	14	1.11	10	RES35	36	2.23
REN40	14	1.11	10	RES40	36	2.23
REN45	14	1.11	10	RES45	36	2.23
REN50	14	1.11	10	RES50	36	2.23
REN60	14	1.11	10	RES60	36	2.23
REN70	46	2.49	5	RES70	83	5.01
REN80	46	2.49	5	RES80	83	5.01
REN90	46	2.49	5	RES90	83	5.01
REN100	46	2.49	5	RES100	83	5.01
REN110	109	5.57	1	RES110	183	9.74
REN125	109	5.57	1	RES125	183	9.74
REN150	109	5.57	1	RES150	183	9.74
REN175	109	5.57	1	RES175	183	9.74
REN200	109	5.57	1	RES200	183	9.74
REN225	266	10.02	1	RES225	373	19.48
REN250	266	10.02	1	RES250	373	19.48
REN300	266	10.02	1	RES300	373	19.48
REN350	266	10.02	1	RES350	373	19.48
REN400	266	10.02	1	RES400	373	19.48
REN450	389	15.31	1	RES450	573	27.83
REN500	389	15.31	1	RES500	573	27.83
REN600	389	15.31	1	RES600	573	27.83

BUSS SUPER-LAG RENEWAL FUSE LINKS



3 to 60 Amperes



70 to 600 Amperes

Super-Lag design gives BUSS Links a long time-lag that reduces number of blows on starting currents or other harmless overloads.

Give better protection because they permit fusing nearer to load.

Come in one piece in all sizes. This makes renewal handy and prevents poor contact developing while fuse is in use.

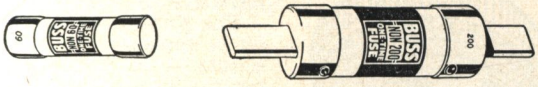
Packed in small quantity in sealed boxes for convenience and to prevent dust, moisture or oxidation from affecting them.

Interchangeable with all makes of standard fuse links.

250-Volt Links				600-Volt Links		
Symbol and Amperes	Wt. Lbs. Per 100	Prices Each	Carton	Symbols and Amperes	Wt. Lbs. Per 100	Price Each
LKN1	.25	.07	20	LKS1	1	$.153
LKN2	.25	.07	20	LKS2	1	.153
LKN3	.25	.07	20	LKS3	1	.153
LKN4	.25	.07	20	LKS4	1	.153
LKN5	.25	.07	20	LKS5	1	.153
LKN6	.25	.028	20	LKS6	1	.07
LKN10	.25	.028	20	LKS10	1	.07
LKN15	.25	.028	20	LKS15	1	.07
LKN20	.25	.028	20	LKS20	1	.07
LKN25	.25	.028	20	LKS25	1	.07
LKN30	.25	.028	20	LKS30	1	.07
LKN35	1	.056	20	LKS35	3	.111
LKN40	1	.056	20	LKS40	3	.111
LKN45	1	.056	20	LKS45	3	.111
LKN50	1	.056	20	LKS50	3	.111
LKN60	1	.056	20	LKS60	3	.111
LKN70	2	.125	10	LKS70	5	.25
LKN80	2	.125	10	LKS80	5	.25
LKN90	2	.125	10	LKS90	5	.25
LKN100	2	.125	10	LKS100	5	.25
LKN110	5	.279	5	LKS110	14	.488
LKN125	5	.279	5	LKS125	14	.488
LKN150	5	.279	5	LKS150	14	.488
LKN175	5	.279	5	LKS175	14	.488
LKN200	5	.279	5	LKS200	14	.488
LKN225	11	.501	5	LKS225	29	.975
LKN250	11	.501	5	LKS250	29	.975
LKN300	11	.501	5	LKS300	29	.975
LKN350	11	.501	5	LKS350	29	.975
LKN400	11	.501	5	LKS400	29	.975
LKN450	16	.763	2	LKS450	37	1.39
LKN500	16	.763	2	LKS500	37	1.39
LKN600	16	.763	2	LKS600	37	1.39

BUSS ONE-TIME FUSES

Non-renewable



Carry Underwriters' Laboratories Inspected label. But fuses cannot be judged by this label alone. It only shows they meet minimum requirements of safety.

Fuses can fail in many other ways. When one blows needlessly because of a badly soldered link —or because of heating from crooked terminals or caps—or from corrosion of link—the user pays the cost of a useless shutdown. Or when a fuse fails to blow quickly enough because of an inaccurate link, the user pays for the damage that results.

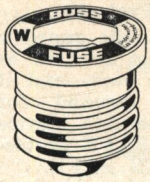
When such troubles from ordinary-run fuses kick back, the dealer pays in lost fuse orders and often loss of other business to boot.

The best guarantee of dependable protection for the user and insurance against loss of profits for the dealer is the BUSS Trade-Mark. It is KNOWN and recognized everywhere as standing for the highest quality in fuses.

BUSS One-Time fuses get the same engineering and care in manufacture as other products carrying the BUSS trade-mark—hence each and every BUSS One-Time fuse can be depended on to operate as intended.

For voltages up to 250 VOLTS				For voltages up to 600 VOLTS			
Symbol and Amperes	Length Ins.	Carton Quantity	Price Each	Symbol and Amperes	Length Ins.	Carton Quantity	Price Each
NON1				NOS1			
NON3				NOS3			
NON6				NOS6			
NON10				NOS10			
NON15	2	10	$.11	NOS15	5	10	$.587
NON20				NOS20			
NON25				NOS25			
NON30				NOS30			
NON35				NOS35			
NON40				NOS40			
NON45	3	10	.22	NOS45	5½	10	.88
NON50				NOS50			
NON60				NOS60			
NON70				NOS70			
NON80				NOS80			
NON90	5⅞	5	.98	NOS90	7⅞	5	1.96
NON100				NOS100			
NON110				NOS110			
NON125				NOS125			
NON150	7⅛	1	2.18	NOS150	9⅝	1	3.82
NON175				NOS175			
NON200				NOS200			
NON225				NOS225			
NON250				NOS250			
NON300	8⅝	1	3.95	NOS300	11⅝	1	7.66
NON350				NOS350			
NON400				NOS400			
NON450				NOS450			
NON500	10⅜	1	6.03	NOS500	13⅜	1	10.97
NON600				NOS600			

BUSS CLEAR WINDOW PLUG FUSES



Carry Underwriters' Laboratories inspected label.

Buss fuses have an extra large, clear window which makes it easy to see if fuse is blown.

Metal cap protects fuse against chipping that might cut fingers or weaken fuse.

BUSS fuses are shockproof—insulated with porcelain and mica like high voltage power lines. They will always fit in holder as there is no solder lump on outside to cause trouble.



Packed five in a box. Information on box tells what to do when fuses blow.

Shelf package 100.

Weight per M. 65 lbs.

Mark & Amperes	Wt. Lbs. Per 100	Price Each	Mark & Amperes	Wt. Lbs. Per 100	Price Each
W1	6.5	$0.09	W10	6.5	$0.08
W3	6.5	.09	W15	6.5	.08
W5	6.5	.09	W20	6.5	.08
W6	6.5	.09	W25	6.5	.08
W8	6.5	.09	W30	6.5	.08

FUSETRON DUAL-ELEMENT PLUG FUSES

15 TO 30 AMPERES



On the ordinary circuit a 15 amp. fuse is largest size that can safely be used, yet such fuses often blow when motors start on washing machines and other devices.

Trying to stop such blowing by using a larger size fuse, or by bridging or tampering the fuse, is dangerous and may result in serious injury or fire.

15 ampere Fusetron dual-element fuses provide a safe solution. They won't blow on motor-starting currents or any heavy current which lasts only a short time, because of their thermal element, yet they protect on dangerous overloads or short-circuits just as well as 15 amp. fuses—because of their fuse link element.

Packed 4 in colorful carton—which carries complete information as to why fuses blow and what to do when they blow.

Amp.	No.	Price	Amp.	No.	Price
15	T15	$0.10	25	T25	$0.10
20	T20	.10	30	T30	.10

Weight 6¾ lbs. per 100.

0 to 14 AMP. FUSETRON DUAL-ELEMENT PLUG FUSES



Can be used to guard motors or apparatus against burnout. Have Edison base—hence insurance and inspection authorities and Underwriters' Laboratories do not recommend their use because all protection is lost if ordinary fuses or Fusetron dual element plug fuses of too large a size are used. Fustats, because of their non-tamperable feature, are recommended for this work.

Amp.	No.	Price	Amp.	No.	Price
1	T1	$0.20	4	T4	$0.20
1¼	T1¼	.20	5	T5	.20
1-6/10	T 6/10	.20	6¼	T6¼	.20
2	T2	.20	8	T8	.20
2½	T2½	.20	10	T10	.20
3-2/10	T3-2/10	.20	12	T12	.20

Packed 4 in a carton, weight 7.7 lbs. per 100

0 to 14 Ampere BUSS FUSTATS

For Motor, Apparatus or Circuit Protection



A Fustat will guard a motor against burnout at a few cents cost—and it meets the demand for a non-tamperable device that makes SAFE protection REMAIN SAFE.

In regular fuse block or switch install a Fustat having the same, or slightly higher, ampere rating as the motor. It will hold the starting current — it will hold harmless overloads and yet it will guard the motor against any excessive current, even light overloads if continued, and it will open like a fuse on short-circuit.

It is a fuse to which a thermal cutout is added. Has same degree of Underwriters' approval for motor-running protection as the most expensive devices made.

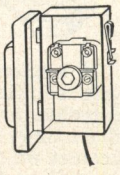
The Fustat LIMITS THE SIZE that can be used. This stops over-fuseing. It cannot readily be replaced with a substitute and it is practically impossible to tamper it in any way without destroying the Fustat or adapter and thereby showing the user that his protection is gone.

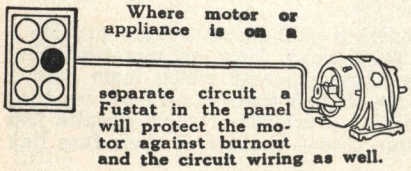
Costly motors or wiring cannot be robbed of protection or a fire hazard created through short-sighted or careless practices.

Fustats fit all standard Edison base fuse holders by use of an inexpensive adapter which locks in place.

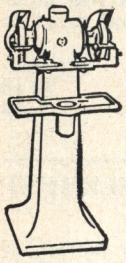


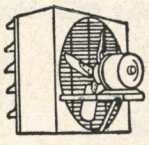
Fustats turn a switch like this into a MOTOR PROTECTIVE DEVICE that is just as effective as the most costly obtainable.



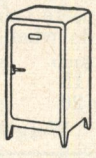


Where motor or appliance is on a separate circuit a Fustat in the panel will protect the motor against burnout and the circuit wiring as well.









On any appliance where there is a fuse receptacle or where one can be mounted — the motor can be protected against burnout at a cost lower than ever before possible.

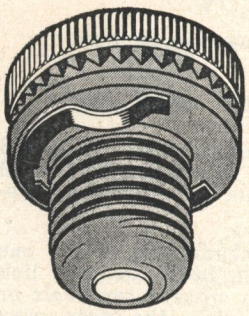
Amp.	FUSTAT No.	Price	ADAPTER No.	Price
1	S1	$0.20	SA1	$0.12
1¼	S1¼	.20	SA1¼	.12
1-6/10	S1-6/10	.20	SA1-6/10	.12
2	S2	.20	SA2	12
2½	S2½	.20	SA2½	.12
3-2/10	S3-2/10	.20	SA3-2/10	.12
4	S4	.20	SA4	.12
5	S5	.20	SA5	.12
6¼	S6¼	.20	SA6¼	.12
8	S8	.20	SA8	.12
10	S10	.20	SA10	.12
12	S12	.20	SA15	.12
14	S14	.20	SA15	.12

Many other sizes from 3/10 ampere up can be obtained.

Adapters not included with Fustate — must be ordered separately.

15 to 30 Ampere BUSS FUSTATS

Type S Fuses — for Circuit Protection

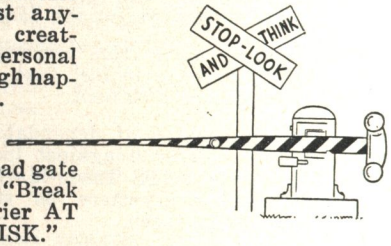


Makes SAFE protection REMAIN SAFE

The Fustat cannot readily be replaced with a substitute — in fact, tampering the Fustat in any way is practically impossible without destroying the Fustat or adapter and thereby clearly showing that all protection is gone.

The Fustat stops over-fuseing. A 20 or 30 ampere Fustat will not fit in a 15 ampere receptacle. Similar limitations apply to other sizes.

The Fustat protects the user against anyone unwittingly creating a fire or personal injury risk through haphazard practices.



Like the railroad gate the Fustat says "Break through this barrier AT YOUR OWN RISK."

But that's not enough—

A protective device that would blow on starting currents would be an impractical device and a terrible nuisance — so the Fustat . . .

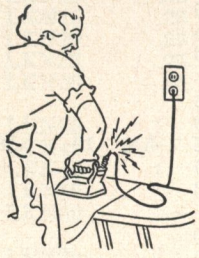
Wipes out any excuse for tampering — it doesn't blow needlessly —

The Fustat is a fuse to which a thermal cutout is added. It gives all the protection of a fuse — but its long time-lag keeps it from blowing when motors start on refrigerators, washing machines or other motor driven appliances.

Permits adding more appliances to present circuits.

An ordinary circuit can be loaded to capacity and yet protected by a 15 ampere Fustat.

Thus the use of present circuits can be expanded with perfect safety.



Protects flexible cords against burnout — in spite of long time-lag.

The Fustat contains a fuse. The ability of a fuse to protect against dangerous cord shorts, grounded sockets, etc., is well known.

The quick action of the Fustat on such shorts prevents spraying of molten metal, starting of fires, burning of users.

Fits present fuse-holders.

Through the use of an inexpensive adapter, that locks in place, the Fustat fits in any standard Edison base fuse-holder.



For circuit protection on voltages up to 125.

Amp.	FUSTAT No.	Price	ADAPTER No.	Price
15	S15	$0.15	SA15	$0.12
20	S20	.15	SA20	.12
25	S25	.15	SA30	.12
30	S30	.15		

Adapters not included with Fustats—must be ordered separately.

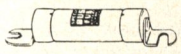
Adapters: SA15 adapter will take 15 amp. SA20 adapter will take 20 amp. SA30 adapter will take 20, 25 and 30 amp.

Packing: 4 in a carton, 100 in a shelf package

BUSS Old Code ONE-TIME FUSES

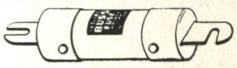
In ordering, be sure to specify SYMBOL and AMPERAGE (not necessary to show old number).
Set-up charge, $2.50 for each size and type of fuse ordered on each shipment.

TYPE "A"—SCREW CLAMP CONTACT



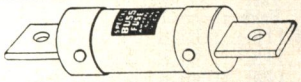
Size of Slot
One-quarter inch
Flush contact

Center to Center	Diam. of cap	SYMBOL	Amperages	Old Number	Price Each
			250 VOLT		
1¾″	13/32″	ADD	15	(2506)	0.22
1 15/16″	9/16″	AFA	2, 3, 5	(2534)	.22
2⅛″	9/16″	AFD	15	(2536)	.22
2¼″	9/16″	AFF	1, 2, 3, 5, 6, 7, 8, 10, 15, 20, 25, 30	(2260)	.22
2⅜″	9/16″	AFH	½, 5, 6, 10, 30	(2502)	.22
2½″	9/16″	AFJ	¼, 1, 1⅓, 2, 3, 5, 10, 15, 20, 25, 30, 35	(2212)	.22
2½″	13/16″	AJA	10, 20, 30, 35, 40, 50, 60, 100	(2216)	.36
2 9/16″	9/16″	Use	AFJ	(206)	.22
2 11/16″	9/16″	AFK	15, 20, 30		.22
2 15/16″	9/16″	AFL	15, 20	(2007)	.24
3″	13/16″	AFS	2, 5, 10, 20, 25, 35, 40, 50, 60	(2543)	.36
3 1/16″	9/16″	AFP	8, 10, 12, 15	(215)	.24
3 5/16″	9/16″	AFR	15, 20, 25, 30		.24
3 7/16″	9/16″	AFT	15, 20, 25, 30	(2010)	.26
3½″	1 1/16″	AFX	40, 50, 60, 70, 75, 80, 100, 120, 125, 150, 200	(2222)	.80
3 13/16″	9/16″	AFU	20, 25, 30	(230)	.26
3⅞″	13/16″	AJD	½, 20, 30, 35, 50		.30
3 15/16″	9/16″	AFZ	20, 25, 30, 35, 40, 50, 60	(2013)	.26
4 9/16″	13/16″	AJH	30, 35, 40, 45, 50, 60, 100	(260)	.36
4¾″	13/16″	AJJ	35, 40, 45, 50, 60	(2017)	.36
5⅜″	1 1/16″	AHF	70, 90, 100, 115, 150	(2026)	1.50
5 13/16″	1 1/16″	ALF	65, 75, 90, 100, 110, 125, 150, 200, 250	(325)	1.50
			600 VOLT		
5⅜″	9/16″	AHS	5, 6, 8, 10, 12, 15	(5201)	.40
6″	13/16″	AJK	1, 3, 6, 10, 15, 20, 25, 30	(5202)	.49
7½″	1 1/16″	ALL	60	(5204)	2.00



ARD
Size of Slot
Five-sixteenths inch

Center to Center	Diam. of cap	SYMBOL	Amperages	Old Number	Price Each
			250 VOLT		
6¾″	1 9/16″	ARD	150, 175, 200, 225, 250, 300, 600, 800	(360)	$3.00



ARG, ASL, ASR, and ASC
Size of Hole
Nine-sixteenths inch

Center to Center	Diam. of cap	SYMBOL	Amperages	Old Number	Price Each
			250 VOLT		
6¾″	1 9/16″	ARG	150, 200, 225, 250, 300	(2029)	$3.00
6¾″	2 1/16″	ASL	250, 275, 300, 350, 375, 400, 450, 500, 600	(2036)	5.00
8⅜″	2 1/16″	ASR	500, 600	(2040)	7.00
			600 VOLT		
8¼″	2 1/16″	ASC	400	(5206)	$7.00

TYPE "B"—FERRULE CONTACT



Diam. of cap	Length	SYMBOL	Amperages	Old Number	Price Each
			250 VOLT		
13/32″	1½″	BAF	1,3,6,10,15,20,25,30 (Old No. 2358)	See form MOS	
13/32″	2 3/16″	BAB	3, 4, 5, 6, 15, 30	(2306)	.14
13/32″	2 11/16″	BAH	½, 10	(2309)	.10
9/16″	1 7/16″	BCA	6	(2541)	.10
9/16″	1¾″	BCC	⅛, ⅜, 4/10, ½, 1, 1⅛, 1½, 1 8/10, 2, 3, 5, 6, 10, 15, 20, 30	(2376)	.10
9/16″	3 3/16″	BCF	1/20, 1/10, 2/10, 1/16, ½, 1, 1 6/10, 2, 3, 4, 5, 6, 10, 15, 20, 25, 30	(2312)	.15
11/16″	2½″	BFA	6/10,1,2,3,5,6,10,12,15,20,25,30	(2391)	.25
25/32″	1⅝″	BFC	30	(130)	.23
13/16″	3¾″	BFF	20, 25, 30, 35, 40, 60	(2316)	.28
15/16″	3⅝″	BHA	35, 40, 50, 60	(2397)	.40
			600 VOLT		
13/32″	2⅞″	BJA	3/10, ½, ¾, 1, 1½, 3, 10	(5221)	.14
13/32″	4⅝″	BJC	½, 1, 2, 3, 4, 5, 6, 7, 8, 10, 15	(5222)	.20
9/16″	1½″	BLA	¾, 1 6/10, 6, 10	(5248)	.10
9/16″	1¾″	BCC	⅛, ⅜, 4/10, ½, 1, 1⅛, 1½, 1 8/10, 2, 3, 5, 6, 10, 15, 20, 30	(5223)	.10
9/16″	2″	BLF	1, 3, 6, 10	(5234)	.10
9/16″	2 7/16″	BLL	3, 30		.15
9/16″	2 15/16″	BLJ	2, 3, 5, 10, 15, 20	(5250)	.15
9/16″	3 3/16″	BCF	1/20, 1/10, 2/10, 1/16, ½, 1, 1 6/10, 2, 3, 4, 5, 6, 10, 15, 20, 25, 30	(5224)	.15
9/16″	3⅝″	BLN	3, 5	(5236)	.16
9/16″	4″	BLR	1/10, 2/10, 3/10, ½, 1, 2, 3, 5, 10, 14	(5225)	.18
9/16″	5″	BLS	½	(5238)	.22
9/16″	5¼″	BLT	2, 3, 5, 20, 25, 30	(5226)	.28
11/16″	4⅝″	BNA	¼, 1, 2, 2½, 3, 4, 6	(5227)	.35
13/16″	4 9/16″	BNF	½, 1, 1 3/10, 1½, 1 8/10, 2, 3, 5, 6, 10	(5229)	.38
13/16″	4 13/16″	BNH	1, 2, 4, 5, 10, 15	(5230)	.38
13/16″	5¼″	BTF	½, 1, 1½, 2, 20, 25, 30		.40
13/16″	5¾″	BNJ	30, 35, 40, 45, 50	(5231)	.42
1 1/16″	6″	BTN	20, 30	(5233)	.59

TYPE "C"—STRAIGHT SIDE CONTACT



Width Overall	Length	SYMBOL	Amperages	Old Number	Price Each
			250 VOLT		
29/32″	3½″	CAB	3, 5, 6, 10, 15, 20, 25, 30, 45, 50	(2417)	$0.75
1 1/32″	4⅛″	CAC	40, 60, 70, 75, 80, 90, 100	(2423)	1.50
1⅜″	4½″	CAF	65, 70, 80, 90, 100, 125	(2481)	1.50
			600 VOLT		
1 3/16″	6¼″	CAH	30, 75, 100	(5251)	1.90
1⅜″	6″	CAJ	45, 75	(5254)	2.25

Fuses shown on this page are made to order. Care must be exercised in ordering as they are not returnable. If you are not sure you have selected the correct type, send sample.

SET-UP CHARGES

Fuses listed on this page take a set-up charge—because such fuses are not carried in stock and are made up only on special order.

Such set-up charge is a flat charge of $2.50 as indicated for each size and type of fuse ordered on each shipment and is in addition to the net prices per fuse shown on this page.

For example, an order calling for 2 AFJ — 30 ampere and 20 AFJ — 15 ampere fuses will be billed as follows:

2 AFJ 30 fuses	$0.22 each	$0.44
20 AFJ 15 fuses	.22 each	4.44
2 set-up charges	2.50 each	5.00
Total		$9.88

Special fuses for any purpose can be furnished. If you cannot find on this page the kind of special fuse you need, submit sample if you have it. Otherwise, submit full details as to what is wanted. Specify:

The type of fuse desired.

The kind of contact.

The size of the terminals or of the fuse case.

The voltage on which the fuse will be used.

The current the fuse must carry continuously.

The current or % overload at which you are particularly interested in having the fuse blow.

How fast it should blow at that overload.

How long the fuse should hold some particular overload without blowing, if time-lag is important.

Chase-Shawmut Company

NOW . . . . . .

every Shawmut fuse has silver-plated contacts at no extra cost.

COOLER FUSES — COOLER SWITCHES

Like Amp-trap and all high quality switch gear, all Shawmut Fuse contacts are now silver-plated. Silver-plating prevents copper oxide formation on contact surfaces—eliminates this non-conductor which is a major source of excessive heat, especially critical in enclosed gear. Silver-plated fuse contact surfaces ALONE give about 90% protection against copper oxide . . . but if fuse holder contact surfaces are ALSO silver-plated, 100% effectiveness is attained.

GIVES LONGER APPARATUS LIFE

Corrosive fumes and high temperature may also oxidize silver, but silver oxide, unlike copper oxide, is a good conductor. Shawmut silver-plated fuses installed in panel boards, switches, motor starters, busways and other apparatus waste far less power in heat and reduce maintenance. This should prove of special benefit to steel mills, chemical plants, petroleum installations and utilities.

SHAWMUT SILVER PLATED T-D TIME-DELAY RENEWABLE FUSES

250 and 600 Volts

T-D renewable fuses provide greater time lag than ordinary fuses, under unusual overload conditions. Permanent rigid blade alignment . . . blades are assembled to an extra heavy insulating crossbar.



COMPLETE FUSES
0 to 60 Amps.
(Ferrule Type)

	250 Volts		600 Volts		
Amps.	Cat. No.	List Each	Cat. No.	List Each	Carton
3	RF 3	$.525	RFS 3	$1.31	10
6	RF 6	.525	RFS 6	1.31	10
10	RF 10	.525	RFS 10	1.31	10
15	RF 15	.525	RFS 15	1.31	10
20	RF 20	.525	RFS 20	1.31	10
25	RF 25	.525	RFS 25	1.31	10
30	RF 30	.525	RFS 30	1.31	10
35	RF 35	1.05	RFS 35	2.10	10
40	RF 40	1.05	RFS 40	2.10	10
45	RF 45	1.05	RFS 45	2.10	10
50	RF 50	1.05	RFS 50	2.10	10
60	RF 60	1.05	RFS 60	2.10	10



70 to 600 Amps.
(Knife-Blade Type)

	250 Volts		600 Volts		
Amps.	Cat. No.	List Each	Cat. No.	List Each	Carton
70	RF 70	$2.35	RFS 70	$4.73	5
80	RF 80	2.35	RFS 80	4.73	5
90	RF 90	2.35	RFS 90	4.73	5
100	RF 100	2.35	RFS 100	4.73	5
110	RF 110	5.25	RFS 110	9.19	1
125	RF 125	5.25	RFS 125	9.19	1
150	RF 150	5.25	RFS 150	9.19	1
175	RF 175	5.25	RFS 175	9.19	1
200	RF 200	5.25	RFS 200	9.19	1
225	RF 225	9.45	RFS 225	18.38	1
250	RF 250	9.45	RFS 250	18.38	1
300	RF 300	9.45	RFS 300	18.38	1
350	RF 350	9.45	RFS 350	18.38	1
400	RF 400	9.45	RFS 400	18.38	1
450	RF 450	14.44	RFS 450	26.25	1
500	RF 500	14.44	RFS 500	26.25	1
600	RF 600	14.44	RFS 600	26.25	1

SHAWMUT T-D TIME-DELAY RENEWAL LINKS

250 and 600 Volts

Shawmut T-D Renewal Links are of Uniform thickness for easy insertion from either end of ferrule type fuse case.



0 to 60 Amps.

	250 Volts		600 Volts		
Amps.	Cat. No.	List Each	Cat. No.	List Each	Carton
3	RL 3	$0.026	RLS 3	$.066	100
6	RL 6	.026	RLS 6	.066	100
10	RL 10	.026	RLS 10	.066	100
15	RL 15	.026	RLS 15	.066	100
20	RL 20	.026	RLS 20	.066	100
25	RL 25	.026	RLS 25	.066	100
30	RL 30	.026	RLS 30	.066	100
35	RL 35	.053	RLS 35	.105	100
40	RL 40	.053	RLS 40	.105	100
45	RL 45	.053	RLS 45	.105	100
50	RL 50	.053	RLS 50	.105	100
60	RL 60	.053	RLS 60	.105	100

70 to 600 Amps.

	250 Volts		600 Volts		
Amps	Cat. No.	List Each	Cat. No.	List Each	Carton
70	RL 70	$.118	RLS 70	$.236	50
80	RL 80	.118	RLS 80	.236	50
90	RL 90	.118	RLS 90	.236	50
100	RL 100	.118	RLS 100	.236	50
110	RL 110	.263	RLS 110	.46	25
125	RL 125	.263	RLS 125	.46	25
150	RL 150	.263	RLS 150	.46	25
175	RL 175	.263	RLS 175	.46	25
200	RL 200	.263	RLS 200	.46	25
225	RL 225	.473	RLS 225	.92	10
250	RL 250	.473	RLS 250	.92	10
300	RL 300	.473	RLS 300	.92	10
350	RL 350	.473	RLS 350	.92	10
400	RL 400	.473	RLS 400	.92	10
450	RL 450	.72	RLS 450	1.31	5
500	RL 500	.72	RLS 500	1.31	5
600	RL 600	.72	RLS 600	1.31	5

SHAWMUT "C-Q-T" GLASS PLUG FUSES

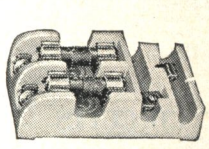
HIGH VISIBILITY . . . before and after blowing. Fuse link is displayed against a black background giving positive and unfailing indication when fuse is blown.

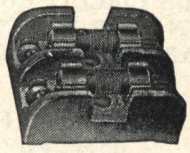


Amps.	Cat. No.	List Each
15	C-Q-T515	$.07
20	C-Q-T520	.07
25	C-Q-T525	.07
30	C-Q-T530	.07

SHAWMUT CUTOUT BASES

CARTRIDGE TYPE





NOTE: Shawmut "SHUR-GRIP" Pressure Connectors furnished as standard equipment on all Shawmut Cartridge Cutouts above 30 Ampere.

0-600 Amps. 250 Volts

FERRULE CONTACT

Porcelain

Cat. No.	Amps.	Description	Carton	List Per C
20675	0-30	S.P. Main Line	5	$48.00
2077	0-30	D.P. Main Line	5	68.00
2079	0-30	T.P. Main Line	5	93.00
2081	0-30	D.P. Single Br.	1	96.00
2085	0-30	D.P. Double Br.	1	180.00
2083	0-30	T.P. Single Br.	1	168.00
20835	0-30	T.P. Double Br.	1	270.00
2087	0-30	3-2 Wire Double Br.	1	216.00
20685	31-60	S.P. Main Line	5	72.00
2078	31-60	D.P. Main Line	1	150.00
2080	31-60	T.P. Main Line	1	220.00
2082	31-60	D.P. Single Br.	1	193.00
2086	31-60	D.P. Double Br.	1	365.00
2084	31-60	T.P. Single Br.	1	340.00
20845	31-60	T.P. Double Br.	1	620.00
2088	31-60	3-2 Wire Double Br.	1	450.00

Moulded Composition

1067	0-30	S.P. Main Line	5	$43.00
1068	31-60	S.P. Main Line	5	68.00

KNIFE BLADE CONTACT

Porcelain

20695	61-100	S.P. Main Line	1	$190.00
2101	61-100	D.P. Main Line	1	320.00
2102	61-100	T.P. Main Line	1	460.00

Moulded Composition

1069	61-100	S.P. Main Line	1	$140.00

Slate

2070	101-200	S.P. Main Line	1	$280.00
2071	201-400	S.P. Main Line	1	760.00
2072	401-600	S.P. Main Line	1	1000.00

SHAWMUT CUTOUT BASES

0-600 Amps. 600 Volts

FERRULE CONTACT

Porcelain

20735	0-30	S.P. Main Line	1	$72.00
20745	31-60	S.P. Main Line	1	120.00

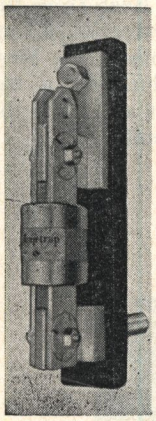
Moulded Composition

1073	0-30	S.P. Main Line	5	$64.00
1074	31-60	S.P. Main Line	1	95.00

KNIFE BLADE CONTACT

Slate

2075	61-100	S.P. Main Line	1	$240.00
2076	101-200	S.P. Main Line	1	345.00
2095	201-400	S.P. Main Line	1	860.00
2096	401-600	S.P. Main Line	1	1135.00



AMP-TRAP

A High Interrupting Capacity Current-Limiting Device

The Amp-trap is a current limiter which will cut off a heavy short circuit current before it can develop to its full magnitude, even with a current as high as 100,000 amperes.

Amp-trap is made in two major classifications:—

1. As a lightning-fast current-limiting device of very high interrupting ability,
2. As a current limiting device of very high interrupting ability with added overload elements, so that it will conform to the performance characteristics of standard fuses as approved by Underwriters' Laboratores, Inc.

It is also made in various mounting arrangements according to specifications, such as:

1. Standard 250 and 600 volt clip spacing up to 600 ampere.
2. On bases with slotted blades and pressure clips arranged for either front or back connection.

Amp-traps have many applications in both AC and DC systems.

In AC systems, they can be used in safety enclosed switches or as feeder and branch circuit protection.

For Detailed Information See Bulletin 514-1

ECONOMY FUSE AND MANUFACTURING CO.

ECON DUAL ELEMENT CARTRIDGE FUSES

THREE FUSE DESIGNS TO MEET VARIOUS CIRCUIT CONDITIONS
ECON FUSES "CARRY THEIR OWN STOP WATCH"
APPROVED BY UNDERWRITERS' LABORATORIES, INC.

QUALITY CONSTRUCTION

ECON fuses are made in three designs, to meet the various circuit conditions. From 0 to 7 amperes 250 and 600 volt rating, a thermal element is used to actuate the overload interrupter.

From 8 to 60 amperes 250 volts, and 8 to 30 amperes 600 volt, the construction is similar except that the fusible link for short circuit protection also acts as a conductor for the transfer of heat to actuate the overload interrupter.

On all fuses above 60 amperes, 250 volt, and 30 amperes 600 volt, the time-lag element is in the form of a cast Econ-alloy member. Heat from the fusible links used for short circuit protection is conducted into the cast Econ-alloy member. This heat, dependent upon the severity and duration of the overload, causes the member to melt and open the circuit within predetermined time limits.

COOLER FUSE CIRCUITS

ECON fuses that open on overload have sufficient spacing between terminals of opposite polarity so that there is no possibility of reestablishing the circuit.

ECON fuses not only provide dependable motor and branch line protection, but also protect against high temperatures in the fuse boxes and the connections associated with the fuse clips and switches.

The ECON fuse is a thermally-operated protective device. Any loose or corroded connections in the fuse box, that might cause high temperatures, will open the ECON fuse associated with the circuit, before the temperature gets high enough to become destructive. If an ECON fuse opens the circuit you can be sure there was an overload, a short circuit or high resistance connection somewhere in the system.

FERRULE TYPE





250 Volt Catalog Symbol ECN

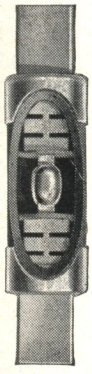
Amps.	Length	Dia. Cap	Ctn. Qty.	Lbs. per 100	List Ea.
1/10 to 2½	2″	9/16″	10	3½	$0.30
2-8/10 to 20	2″	9/16″	10	5	.30
25, 30	2″	9/16″	10	5	.35
35, 40, 45, 50, 60	3″	13/16″	10	11	.70

600 Volt Catalog Symbol ECS

1/10 to 7	5″	13/16″	10	14	.75
8, 9, 10, 12, 15, 17½, 20	5″	13/16″	10	15	.75
25, 30	5″	13/16″	10	17	.85
35, 40, 45, 50, 60	5½″	1 1/16″	10	24	1.50

KNIFE BLADE TYPE





250 Volt Catalog Symbol ECN

Amps.	Length	Dia. Cap	Ctn. Qty.	Lbs. per 100	List Ea.
70, 80, 90, 100	5 7/8″	¾″	5	30	$1.65
110, 125, 150, 175, 200	7⅛″	1⅛″	1	80	3.60
225, 250, 300, 350, 400	8 5/8″	1⅝″	1	170	6.50
450, 500, 600	10⅜″	2″	1	290	10.00

600 Volt Catalog Symbol ECS

70, 80, 90, 100	7⅞″	¾″	5	48	3.20
110, 125, 150, 175, 200	9⅝″	1⅛″	1	122	6.25
225, 250, 300, 350, 400	11⅝″	1⅝″	1	315	12.50
450, 500, 600	13⅜″	2″	1	500	18.00

ECONOMY "DELAY" RENEWABLE CARTRIDGE FUSES

250 VOLTS
FERRULE TYPE FUSES
N. E. Code Standard
1-60 AMPERES



Cat. No.	Amperes	Carton Quantity	List Each
F 325	3	10	$0.40
F 625	6	10	.40
F 1025	10	10	.40
F 1525	15	10	.40
F 2025	20	10	.40
F 2525	25	10	.40
F 3025	30	10	.40
F 3525	35	10	.80
F 4025	40	10	.80
F 4525	45	10	.80
F 5025	50	10	.80
F 6025	60	10	.80

FERRULE TYPE "DELAY"
RENEWAL LINKS



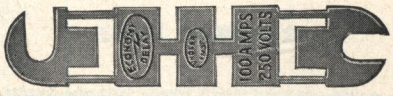
Cat. No.	Amperes	Carton Quantity	List Each
R 203	3	100	$0.02
R 206	6	100	.02
R 210	10	100	.02
R 215	15	100	.02
R 220	20	100	.02
R 225	25	100	.02
R 230	30	100	.02
R 235	35	100	.04
R 240	40	100	.04
R 245	45	100	.04
R 250	50	100	.04
R 260	60	100	.04

250 VOLTS
KNIFE BLADE TYPES FUSES
N. E. Code Standard
61-600 AMPERES



Cat. No.	Amperes	Carton Quantity	List Each
F 7025	70	5	$1.80
F 8025	80	5	1.80
F 9025	90	5	1.80
F 10025	100	5	1.80
F 11025	110	1	4.00
F 12525	125	1	4.00
F 15025	150	1	4.00
F 17525	175	1	4.00
F 20025	200	1	4.00
F 22525	225	1	7.20
F 25025	250	1	7.20
F 30025	300	1	7.20
F 35025	350	1	7.20
F 40025	400	1	7.20
F 45025	450	1	11.00
F 50025	500	1	11.00
F 60025	600	1	11.00

KNIFE BLADE TYPE "DELAY"
RENEWAL LINKS



Cat. No.	Amperes	Carton Quantity	List Each
R 270	70	50	$0.09
R 280	80	50	.09
R 290	90	50	.09
R 2100	100	50	.09
R 2110	110	25	.20
R 2125	125	25	.20
R 2150	150	25	.20
R 2175	175	25	.20
R 2200	200	25	.20
R 2225	225	12	.36
R 2250	250	12	.36
R 2300	300	12	.36
R 2350	350	12	.36
R 2400	400	12	.36
R 2450	450	10	.55
R 2500	500	10	.55
R 2600	600	10	.55

ECONOMY "DELAY" RENEWABLE CARTRIDGE FUSES

600 VOLTS

FERRULE TYPE FUSES

N. E. Code Standard

1-60 AMPERES



Cat. No.	Amperes	Carton Quantity	List Each
F 305	3	10	$1.00
F 605	6	10	1.00
F 1005	10	10	1.00
F 1505	15	10	1.00
F 2005	20	10	1.00
F 2505	25	10	1.00
F 3005	30	10	1.00
F 3505	35	10	1.60
F 4005	40	10	1.60
F 4505	45	10	1.60
F 5005	50	10	1.60
F 6005	60	10	1.60

FERRULE TYPE "DELAY"

RENEWAL LINKS



Cat. No.	Amperes	Carton Quantity	List Each
R 603	3	100	$0.05
R 606	6	100	.05
R 610	10	100	.05
R 615	15	100	.05
R 620	20	100	.05
R 625	25	100	.05
R 630	30	100	.05
R 635	35	100	.08
R 640	40	100	.08
R 645	45	100	.08
R 650	50	100	.08
R 660	60	100	.08

600 VOLTS

KNIFE BLADE TYPE FUSES

N. E. Code Standard

61-600 AMPERES



Cat. No.	Amperes	Carton Quantity	List Each
F 7005	70	5	$3.60
F 8005	80	5	3.60
F 9005	90	5	3.60
F 10005	100	5	3.60
F 11005	110	1	7.00
F 12505	125	1	7.00
F 15005	150	1	7.00
F 17505	175	1	7.00
F 20005	200	1	7.00
F 22505	225	1	14.00
F 25005	250	1	14.00
F 30005	300	1	14.00
F 35005	350	1	14.00
F 40005	400	1	14.00
F 45005	450	1	20.00
F 50005	500	1	20.00
F 60005	600	1	20.00

KNIFE BLADE TYPE "DELAY"

RENEWAL LINKS



Cat. No.	Amperes	Carton Quantity	List Each
R 670	70	50	$0.18
R 680	80	50	.18
R 690	90	50	.18
R 6100	100	50	.18
R 6110	110	25	.35
R 6125	125	25	.35
R 6150	150	25	.35
R 6175	175	25	.35
R 6200	200	25	.35
R 6225	225	12	.70
R 6250	250	12	.70
R 6300	300	12	.70
R 6350	350	12	.70
R 6400	400	12	.70
R 6450	450	10	1.00
R 6500	500	10	1.00
R 6600	600	10	1.00

ECONOMY NON-RENEWABLE CLEARSITE PLUG FUSES

Listed as Standard by

UNDERWRITERS' LABORATORIES

Approved by FACTORY MUTUAL LABORATORIES



WHEN a Clearsite Fuse has not blown the fuse element, with the amperage stamped upon it, is plainly visible through the clear window.



WHEN a Clearsite Fuse has blown on overload, a gap appears in the fuse link under the window.



WHEN a Clearsite Fuse has blown on short circuit the window is blackened, making vision of fuse link impossible.

Retail Package

STANDARD SIZES

Cat. No.	Amp.	Carton* Quantity	List Each
5710	10	100	$0.07
5715	15	100	.07
5720	20	100	.07
5725	25	100	.07
5730	30	100	.07

SUB-STANDARD SIZES

5703	3	100	$0.08
5705	5	100	.08
5706	6	100	.08
5708	8	100	.08

*20 Retail Packages of 5 Fuses Each.

Packed 50 Fuses per Carton

STANDARD SIZES

Cat. No.	Amp.	Carton Quantity	List Each
4310	10	50	$0.07
4315	15	50	.07
4320	20	50	.07
4325	25	50	.07
4330	30	50	.07

SUB-STANDARD SIZES

4303	3	50	$0.08
4305	5	50	.08
4306	6	50	.08
4308	8	50	.08

"ECONOMY" RENEWABLE PLUG FUSES

National Electrical Code Standard

Listed as Standard

by Underwriters' Laboratories







125 VOLTS

3-30 AMPERES

STANDARD SIZES

Cat. No.	Amperes	Carton Quantity	List Each
PF 1068	10	10	$0.50
PF 1568	15	10	0.50
PF 2068	20	10	0.50
PF 2568	25	10	0.50
PF 3068	30	10	0.50

SUB-STANDARD SIZES

PF 368	3	10	$0.50
PF 568	5	10	0.50
PF 668	6	10	0.50
PF 868	8	10	0.50

ECONOMY "DROP OUT" RENEWAL LINKS

STANDARD SIZES

Cat. No.	Amperes	Carton Quantity	List Each
PR 6810	10	100	$0.02
PR 6815	15	100	.02
PR 6820	20	100	.02
PR 6825	25	100	.02
PR 6830	30	100	.02

SUB-STANDARD SIZES

PR 6803	3	100	$0.02
PR 6805	5	100	.02
PR 6806	6	100	.02
PR 6808	8	100	.02

ECONOMY NON-RENEWABLE CARTRIDGE FUSES

1-600 Amperes, 250 and 600 Volts

"ECO" NON-INDICATING ENCLOSED FUSES
STANDARD SIZES

250 VOLTS—FERRULE TYPE

Catalog No.	Ampere Capacity	Carton	List Each
111	1	10	$0.15
113	3	10	.15
116	6	10	.15
1110	10	10	.15
1115	15	10	.15
1120	20	10	.15
1125	25	10	.15
1130	30	10	.15
1135	35	10	.30
1140	40	10	.30
1145	45	10	.30
1150	50	10	.30
1160	60	10	.30

250 VOLTS—KNIFE BLADE TYPE

1170	70	5	$0.90
1180	80	5	.90
1190	90	5	.90
11100	100	5	.90
11110	110	1	2.00
11125	125	1	2.00
11150	150	1	2.00
11175	175	1	2.00
11200	200	1	2.00
11225	225	1	3.60
11250	250	1	3.60
11300	300	1	3.60
11350	350	1	3.60
11400	400	1	3.60
11450	450	1	5.50
11500	500	1	5.50
11600	600	1	5.50

600 VOLTS—FERRULE TYPE

161	1	10	$0.50
163	3	10	.50
166	6	10	.50
1610	10	10	.50
1615	15	10	.50
1620	20	10	.50
1625	25	10	.50
1630	30	10	.50
1635	35	10	.80
1640	40	10	.80
1645	45	10	.80
1650	50	10	.80
1660	60	10	.80

600 VOLTS—KNIFE BLADE TYPE

1670	70	5	$1.80
1680	80	5	1.80
1690	90	5	1.80
16100	100	5	1.80
16110	110	1	3.50
16125	125	1	3.50
16150	150	1	3.50
16175	175	1	3.50
16200	200	1	3.50
16225	225	1	7.00
16250	250	1	7.00
16300	300	1	7.00
16350	350	1	7.00
16400	400	1	7.00
16450	450	1	10.00
16500	500	1	10.00
16600	600	1	10.00

"ARKLESS" INDICATING ENCLOSED FUSES
STANDARD SIZES

250 VOLTS—FERRULE TYPE

Catalog No.	Ampere Capacity	Carton	List Each
3103	3	10	$0.15
3106	6	10	.15
3110	10	10	.15
3115	15	10	.15
3120	20	10	.15
3125	25	10	.15
3130	30	10	.15
3135	35	10	.30
3140	40	10	.30
3145	45	10	.30
3150	50	10	.30
3160	60	10	.30

250 VOLTS—KNIFE BLADE TYPE

3170	70	5	$0.90
3180	80	5	.90
3190	90	5	.90
3200	100	5	.90
3210	110	1	2.00
3225	125	1	2.00
3250	150	1	2.00
3275	175	1	2.00
3300	200	1	2.00
3325	225	1	3.60
3350	250	1	3.60
3400	300	1	3.60
3450	350	1	3.60
3500	400	1	3.60
3550	450	1	5.50
3600	500	1	5.50
3700	600	1	5.50

600 VOLTS—FERRULE TYPE

5003	3	10	$0.50
5006	6	10	.50
5010	10	10	.50
5015	15	10	.50
5020	20	10	.50
5025	25	10	.50
5030	30	10	.50
5035	35	10	.80
5040	40	10	.80
5045	45	10	.80
5050	50	10	.80
5060	60	10	.80

600 VOLTS—KNIFE BLADE TYPE

5070	70	5	$1.80
5080	80	5	1.80
5090	90	5	1.80
5100	100	5	1.80
5110	110	1	3.50
5125	125	1	3.50
5150	150	1	3.50
5175	175	1	3.50
5200	200	1	3.50
5225	225	1	7.00
5250	250	1	7.00
5300	300	1	7.00
5350	350	1	7.00
5400	400	1	7.00
5450	450	1	10.00
5500	500	1	10.00
5600	600	1	10.00

VULCAN ELECTRIC SOLDERING IRONS

The Vulcan construction is unique in the simplicity of its service requirements, consisting of five complete replaceable parts: Tip, Heating Head, Handle, Cord and Plug.



DEALERS' DISPLAY SELLING BOARD

One of these handsomely colored boards free to every Distributor ordering one each of the 8 sizes of tools and four extra tools, for a small stock, making a dozen lot.

Some of the Uses

No. 20

Equal to 1 pound per pair soldering copper. Radio and home use, telephone repairs and all very light soldering.

No. 30

Equal to 1½ pounds per pair soldering copper. Radio and home use, fuses, instruments, inspectors' or linesmen's tool kits, etc.

No. 40

Equal to 2½ pounds per pair soldering copper. Telephone switchboards, electrical instruments, light manufacturing, fuses and radio apparatus.

No. 50

Equal to 3½ pounds per pair soldering copper. Fast telephone work, art glass, light automobile repairs, light tinware and general home use.

No. 60

Equal to 4½ pounds per pair soldering copper. Light automobile repairs, light tinware, general utility and home use.

No. 70

Equal to 6 pounds per pair soldering copper. Medium tinware, general manufacturing, metal patterns, automobile work, etc.

No. 80

Equal to 7½ pounds per pair soldering copper. Heavy tinware, sheet steel and galvanized iron, metal boats, refrigerators, automobile radiators, roofing, etc.

No. 90

Equal to 10 pounds per pair soldering copper. Automobile radiators, copper sinks, roofs, leaders, heavy metal patterns, refrigerators, and all heavy soldering.

No. 900

Equal to 15 pounds per pair soldering copper. For extra heavy soldering.

VULCAN ELECTRIC SOLDERING IRONS

Specifications and Prices

SCREW TIP TYPE

Cat. No	Watts	Net Wt. Lbs.	Tip Dia. Inches	Price Complete	Extra Tip	Heating Head	Handle
20	50	⅝	7/16	$ 6.55	$ .50	$ 4.65	$.65
30	60	¾	½	8.95	.70	6.80	.65
40	90	⅞	½	9.80	.70	7.75	.65
50	130	1⅛	⅞	11.65	1.60	9.25	.65
60	175	1⅜	1	13.35	2.10	10.45	.65
70	220	1¾	1⅛	15.50	2.75	12.55	.65
80	310	2⅜	1⅜	17.70	3.85	13.95	.65
90	430	3⅛	1⅝	20.15	5.75	15.30	.65
900	700	5¼	1¾	37.30	7.60	31.10	.65

PLUG TIP TYPE

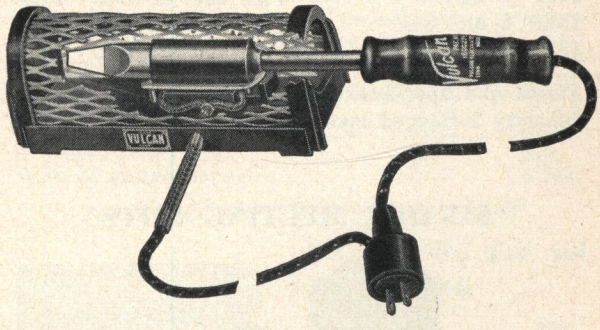
Cat. No.	Watts	Net Wt. Lbs.	Tip Dia. Inches	Price Complete	Extra Tip	Heating Head	Heating Element Only	Handle
25	50	⅝	¼	$ 6.25	$ .45	$ 4.10	†$3.25	$.65
35	100	1⅛	⅜	9.80	.65	7.85	4.25	.65
*453	150	1¼	⅜	10.65	.65	8.75	5.20	.65
45	150	1¼	½	11.15	1.05	8.85	5.30	.65
55	200	1⅝	⅝	11.55	1.35	9.20	5.80	.65
75	300	2⅜	⅞	15.10	2.50	11.95	†7.75	.65

Always specify voltage when ordering.

Equipped with 6-foot flexible heater cord and plug. Standard voltages of 110-120, 230 and 220-240. Special voltages, $1.00 extra. Will operate with identical results on A.C. or D.C.

* Made to take a ⅜" tip for high speed production.
† Replaceable at factory on No. 25 and No. 75 only.
Plug type has replaceable heating element.

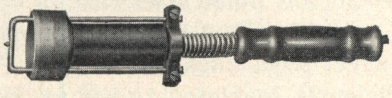
VULCAN TOOL HOLDER



A protection against hazards. Is an insurance against soldering iron overheating. A very handy attachment.

Cat. No.	List Price
2100-T with Thermostatic Control	$7.30
2100 without Thermostatic Control	4.50

VULCAN ELECTRIC CAN CAPPING TOOLS



Mfrs. No.	Watts	Price Each	Mfrs. No.	Watts	Price Each
82	310	30.25	92	430	$31.90

VULCAN ELECTRIC GLUE POTS

WATER JACKET TYPE WITH THERMOSTAT CONTROL



Construction, heavy cast aluminum throughout. Use of a liquid heating medium permits controlled transfer of heat to glue without danger of localized overheating, safeguarding the quality of the adhesive.

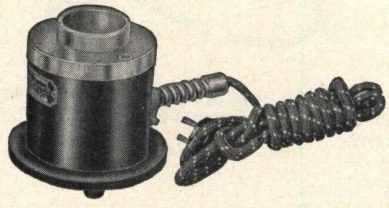
In addition to water jacket feature, all sizes are equipped with thermostats, holding the glue temperature to a maximum of 150°F. These pots are heated with long life, flat enclosed heating elements, easily replaceable, and furnished with a 6 foot Underwriters' listed heater cord. Operating cost is very low because of thermostatic control.

When ordering, specify 110-120 volts or 220-230 volts, and whether for AC or DC.

Cat. No.	Glue Cap.	Dimen. Outside, In. Diam.	Height	Watts	Approx. Shp. Wt.	List Price
1809	1 pt.	6¼	6½	200	8 lbs.	$17.00
1810	1 qt.	7	7¼	250	10 lbs.	21.50
1811	2 qt.	8½	8½	450	15 lbs.	33.15
1812	4 qt.	8¾	11⅛	700	20 lbs.	54.20

Prices and specifications for Glue Pots of greater capacity furnished upon request.

SOLDER MELTING POTS



Many sizes of solder pots available having crucibles ranging from 1⅝" dia. x 1⅜" deep up to 10⅜" x 14". Capacities 14 oz. to 368 lbs. of 50/50 solder. Some sizes cast in one piece, others with cast iron crucibles supported in heavy sheet steel durable casings. Properly and efficiently insulated to reduce heat loss.

List Prices ..... $8.40 up

DRY TYPE WITH THERMOSTAT CONTROL



Construction, heavy sheet iron body, well insulated; removable porcelain-enamelled, metal glue container. Jacket encircled with efficient type band heating element, fully insulated with mica. Heating element replaceable, if necessary. Vulcan clamp-on thermostat is mounted on jacket, keeping glue at recommended temperature (145-150°F).

Each pot furnished complete with bails, wiping bar, and cover. Equipped with 6 feet of approved heater cord.

Available in standard voltages, 110-120 volts or 220-240 volts. Specify AC or DC and voltage.

Cat. No.	Glue Cap.	Dimen. Outside, In. Diam.	Height	Watts	Approx. Shp. Wt.	List Price
1858	1 qt.	7⅞	5¾	175	6 lbs.	$20.55
1860	2 qt.	7⅞	8¾	250	7 lbs.	39.00
1864	4 qt.	7⅞	11⅛	500	14 lbs.	49.60

WAX MELTING POTS



These pots are ideal for melting parafin wax, and other compounds.

Made of durable metal—simple construction. No. 1412 illustrated. List Price $10.75. Capacity approximately one quart.

Available in several sizes with or without thermostatic control. List price $7.45 and up.

ALLEN SODERING STICKS

Item 3



Makes a joint on any metal about three times as strong as is made with muriatic acid flux, and one that is free from subsequent corrosion.

Heat metal parts to be sodered. Rub stick onto hot metal surface; apply soder and hold together parts to be sodered until set—about 1 seconds time.



	Size	No. per Carton	Each
ALLEN	1x5½ in.	24	$.30
Samson	1x5 in.	24	.18

ALLEN SODERING PASTE

Item 2



Will not corrode nor injure in any way surfaces to which it is applied. Soder dipped into this paste is made self fluxing.



Style	Pkg.	No. per Carton	Each
2 oz.	cans	24	$ .13
4 oz.	cans	24	.20
½ lb.	cans	12	.50
1 lb.	cans	6	.70
5 lb.	cans	1	2.75
50 lb.	pail }	Write	
500 lb.	Bbl. }	for prices per pound	

ALLEN SODERING SALTS

Item 1

In a dry concentrated form, add 3 parts of water to 1 part salt which makes a flux of suficient strength for all metals.



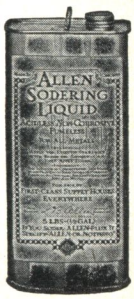
Size	No. per Carton	Each
½ lb. bottles	12	$0.40
1 lb. bottles	6	.59
5 lb. bottles	1	2.50

Also in 10 lb. 25 lb. 50 lb. 100 lb. and 500 lb. bbls.

ALLEN SODERING LIQUID

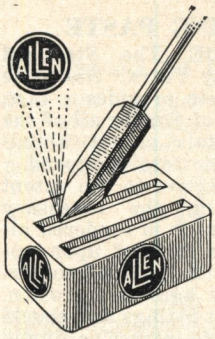
(Item 6)

Standard Formula. For all-around work, for all metals save aluminum and stainless steel. 17,000 pounds to the square inch with no gumming, fumes, or corrosion. Double strength, non-evaporating. Works like lightning. Adaptable to hand, or machine soldering. Excellent for tinning the sodering copper.



Size	List Each	No. per Carton
2 oz.	$ .13	24
4 oz.	.20	12
Qt.	.80	4
Gal.	2.00	1

ALLEN SOLID SAL AMMONIAC



Item 11

Cleans and tins bright the sodering copper. Outlives fibrous lump many times. Does not crumble, nor corrode tools in the kit, nor on the job.

Size	Each	No. per Carton
¼ lb.	$0.20	24
½ lb.	.35	12
1 lb.	.60	6

ACID SWABS

Item 12



	Price per Gross	No. per Carton
Supertite, medium size 5½x½ in.	$3.90	4 gross
Supertite, large size 6x⅝ in.	4.60	3 gross

ALLEN SODERING OIL

(Item 4)

A highly concentrated sodering compound. Causes neither verdigris nor corrosion. Makes perfect electrical and mechanical joints. For hand or machine sodering.

Size	List Each Per Lb.	No. per Carton
1 lb.	$ .80	6
3 lb.	.70	3
12 lb.	.60	1

ALLEN ALUMI SODER

Item 18



Soders aluminum without the aid of acid or any other flux. Other metals may be sodered to aluminum with ordinary soder after the parts have been "tinned" with aluminum soder. (Also works on Cast Iron.)

Size	List Per Lb.	No. per Carton
¼ lb. bars	$3.15	6 lbs.
1 lb. bars	2.55	6 lbs.
6″ pieces (trial size)	2.91	doz.
Wire 11 gauge Square	3.40	6 lbs.

ALLEN COMMUTATOR LUBRICANT



Renders a fine gloss, and prevents sparking.

	Each	Per Carton
For copper or carbon brushes	$0.30	24

ALLEN NEUTRAL ROSIN FLUID FLUX

(Item 8)



This is a flux of absolute safety for electric motors, telephone, radio, commutators, instrument work, fine wires, etc. This flux is so safe you can spill the flux on the work allowing it to remain forever with no corrosion hazard to the finest wire or metals. Allen Neutral Rosin Fluid Flux is absolutely neutral and moisture free and absolutely non-conductive to electrical current.

Size	List Each	Per Ctn.
Qt.	$1.00	3
Gal.	3.50	1

THE M. W. DUNTON COMPANY

NOKORODE SOLDERING PASTE



NOKORODE, The Standard for over Fifty Years: Nokorode soldering paste provides a fast, safe method of fluxing all of the common metals except aluminum. Underwriters' approved.

Although active to the extent of performing the necessary fluxing action, it is rendered almost chemically inert upon application of the heat of soldering, and protects the solder joint against corrosion. Especially recommended for sweat fittings and should always be used in preference to corrosive liquid fluxes. Available in the following size containers: 2 ozs., 1 lb., 10 lbs., 25 lbs., and 100 lbs.

DUNTON'S ROSIN CORE SOLDER



• Especially designed for making trouble free joints on electrical, telephone and radio work.

Laboratory controlled, precision drawn to a wide range of gauges. Conforms to Federal Specifications.

Available in the following size spools: 1 lb., 5 lbs., and 20 lbs.

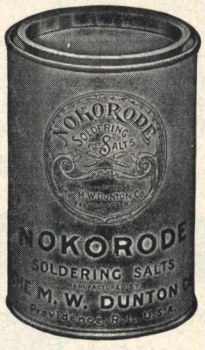


DUNTON'S ACID CORE SOLDER

Acid core solders are suitable for general work.

Precision drawn to a wide range of gauges. Makes a neat, tight, lasting metal joint. Available in the following size spools: 1 lb., 5 lbs., and 20 lbs.

DUNTON'S NOKORODE SOLDERING SALTS



is made for the convenience of making up solutions of different strength by adding water.

By adding water at the rate of one gallon to one pound of the Salts a good solution for most kinds of soldering can be obtained, but different strengths can be made as desired. Available in the following size containers: 1 lb., 5 lbs., 25 lbs., 50 lbs., and 100 lbs.

NOKORODE SOLDER PAINT

A paste combination of Powdered Solder and Nokorode Flux Oil and other chemical. Can be painted on to units to be soldered. Offers a quick, safe and economical method of soldering in unlimited industries. Requires washing after soldering. Available in the following size containers: 1 lb., 3 lbs., and 5 lbs.

DUNTON'S TINNERS' FLUID

A superior soldering Acid with enough acid added to clean off dirt, eat through *galvanized iron to reach base metal so solder can hold firmly. Made especially for use of plumbers, tinsmiths, garage work, general automotive work, etc. Available in following sizes: 3 oz. bottles, 1 pint bottles, 1 qt., 1 gal. and 5 gal. jugs. *(galvanizing on the iron).

DUNTON'S STAINLESS STEEL FLUID

is a strong acid flux for soldering stainless steel. Stainless steel requires a strong, active flux to do this kind of work and when left on the metal for a little longer time than the other types of fluxes, produces a very fine job of soldering. Available in the following size containers: 3 oz. bottles, 1 pt. bottles, 1 qt. jugs, 1 gal. jugs, and 5 gal. jugs.

DUNTON'S ROSIN "X"

is a fluid flux prepared especially for electronic industries, for use on clean new metals. Is free from acid reaction, contains no acids and is very popular among many radio technicians. Non-corrosive and non-conductive. Available in the following size containers: 1 pt. bottles, 1 qt. jugs, 1 gal. jugs, and 5 gal. jugs.

SILVER SOLDERING FLUX

May be used for all metals except aluminum. Works well at both high and low temperature, 1000F to 1700F. Non Glazing. Paste may be brushed on. After soldering, residue may be washed off easily in hot water. Removes Oxides rapidly.

NEUTRO FLUID FLUX,

safe as rosin, fast as acid, made especially for the electronic industries, free from corrosion, resulting in electrical leakage. Leaves no hard to remove residues. Is non-fuming, non-toxic, non-inflammable, non-conductive and non-hygroscopic, and is readily water soluble. In the container, it is mildly acid, but when it is used, the heat of soldering completely neutralizes the solution so that it becomes a neutral non-corrosive, non-conductive, non-hygroscopic residue. It is not designed for use on Inconel, tarnished stainless steel, aluminum. Available in the following size containers: 1 pt. bottles, 1 qt. jugs, 1 gal. jugs, and 5 gal. jugs.

PLASTIC ELECTRICAL TAPE

Recommended in place of Friction and Rubber Tape particularly in the following situations:



where tape is subject to abrasion resists abrasion where space is limited (makes neater job, as in terminal box) where tape is subject to water, acids, alkalies or corrosion (resists all) where time must be saved (quicker than combination of friction plus rubber tape).

Packed individually. One 66-ft. roll.



DUNTON'S 95/5 SOLDER

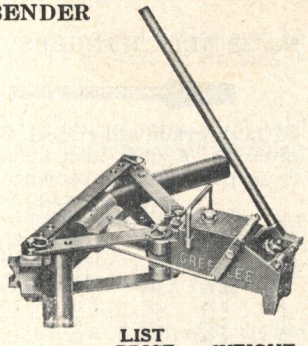
Used for coating and joining metals for high temperatures and different soldering. Available in the following size spools: 1 lb., 5 lbs., and 20 lbs.



DUNTON'S "SUPER" 50/50 SOLDER

GREENLEE TOOLS FOR GREENLEE ELECTRICAL CONSTRUCTION

No. 770 HYDRAULIC BENDER



Designed for bending conduit and pipe from 1¼ to 3-inch size, without the use of heat or filler. Bends are smooth, accurate — no kinking or damage to conduit or pipe. Maximum piston pressure, 25 tons. Extra attachments available for ½, ¾, and 1-inch sizes.

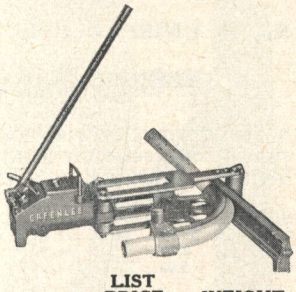
	LIST PRICE	WEIGHT
No. 770 Complete for 1¼ to 3-inch	$197.50	205 lbs.
No. 770 Complete for ½ to 3-inch	212.50	215 lbs.

No. 775 HYDRAULIC BENDER

Similar in design to the No. 770 Bender, but of larger size, heavier weight, and powered to bend larger sizes of conduit and pipe: 3, 3½, 4, and 5-inch. Maximum piston pressure, 40 tons. Available with extra shoes and supports for bending pipe from 1¼ to 5-inch.

	LIST PRICE	WEIGHT
No. 775 Complete for 3 to 5-inch	$276.50	402 lbs.
No. 775 Complete for 1¼ to 5-inch	320.00	452 lbs.

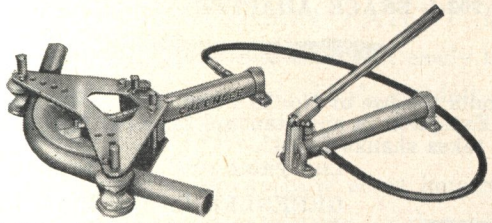
Nos. 770-T and 775-T THIN-WALL HYDRAULIC CONDUIT BENDERS



Consists of the Greenlee No. 770 or No. 775 Power Unit with attachments designed to make a full 90° bend with one forward movement of the ram. The regular attachment for this machine, which will bend ¾, 1, 1¼, 1½, and 2-inch thin-wall conduit, can easily and quickly be applied to the No. 770 or No. 775.

	LIST PRICE	WEIGHT
No. 770-T Complete for 1¼ to 2-inch	$275.00	266 lbs.
No. 770-T Complete for ¾ to 2-inch	330.00	350 lbs.
No. 775-T Complete for ¾ to 2-inch	415.00	500 lbs.
Attachments Only		
No. 770-T Attachments for 1¼ to 2-inch	$133.30	190 lbs.
No. 770-T Attachments for ¾ to 2-inch	183.30	260 lbs.
No. 775-T Attachments for ¾ to 2-inch	231.00	340 lbs.

No. 880 LIGHTWEIGHT HYDRAULIC BENDER

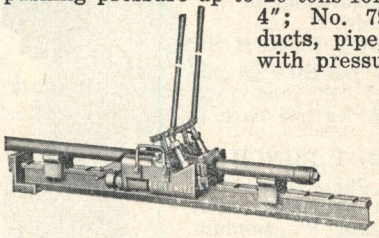


A lightweight with the power of a heavyweight . . . full 90 degree bend with one ram stroke. Separate two-speed hand pump, which can be replaced by a Greenlee Power Pump. Can use other Greenlee attachments for tubing, bus-bar, etc. Regularly furnished with the hand pump and set of four, five or six bending shoes for pipe or conduit up to 2".

	List Price	Weight
No. 880 for ½" to 2" Conduit	$235.00	84 lbs.
No. 880-A for ¾" to 2" Conduit	230.00	83 lbs.
No. 880-B for 1" to 2" Conduit	225.00	81½ lbs.

Nos. 790 and 795 HYDRAULIC PIPE PUSHERS

One man can push pipe under ground . . . eliminates extensive ditching, tearing up pavements and lawns, back-filling, and repaving. Two models: No. 790 has pushing pressure up to 20 tons for pipe from ¾" to 4"; No. 795 handles large ducts, pipe, etc., beyond 4", with pressure up to 75 tons. Six speeds for varying soil conditions. Compact, portable. Hand or power-pump operated.



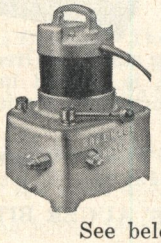
No. 790 Power Unit Only		PRICE	WEIGHT
		$235.00	160
P-80	5½-ft. Base with 2 Pipe Supports and Backing Plate	48.00	145
P-81	6½-ft. Base with 2 Pipe Supports and Backing Plate	54.00	165
P-82	7½-ft. Base with 2 Pipe Supports and Backing Plate	60.00	185
P-83	8½-ft. Base with 2 Pipe Supports and Backing Plate	66.00	205

Quick-Acting Pipe Clamps

P-8	¾-inch Pipe Clamp	$ 14.25	10
P-9	1-inch Pipe Clamp	14.25	10
P-10	1¼-inch Pipe Clamp	14.25	10
P-11	1½-inch Pipe Clamp	15.25	10
P-12	2-inch Pipe Clamp	16.25	10
P-13	2½-inch Pipe Clamp	18.25	11
P-14	3-inch Pipe Clamp	21.00	16
P-15	3½-inch Pipe Clamp	23.50	16
P-16	4-inch Pipe Clamp	26.00	18

No. 795 Power Unit Only		$415.00	280
P-132	10-ft. Steel Base with 2 Pipe Supports and Backing Plate	145.00	300
P-133	12-ft. Steel Base with 2 Pipe Supports and Backing Plate	170.00	360
P-131	Rail Splice Plate	10.00	18½

No. 798-AC-SA Portable Power Pump



A powerful, easily-carried power pump for driving **Greenlee** hydraulic units. Base and top made of cast aluminum with built-in vertical ¾-H.P., 115-volt a-c single-phase motor. Pump develops 6000 psi continuous pressure and up to 10,000 psi intermittent pressure.

Weight 70 lbs. List Price **$370.00.**

See below for hose and coupler.

NO. 798 CO-SA POWER PUMP



A ½-H.P. Universal Motor, operating on either 110-volt a.c. or 115-volt d.c. current, permits the use of this pump without concern regarding the type of current available. Weight has been held to a minimum by using aluminum alloy castings. Easily portable and ideal for operating all Greenlee Benders.

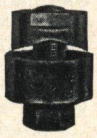
	List Price	Weight
No. 798 CO-SA Pump	$380.00	50 lbs.

(Does not include high-pressure hose or coupler)

Six-Foot High-Pressure Hose	$10.75
No. 3548-GB High-Pressure coupler	8.50

GREENLEE TOOLS FOR GREENLEE ELECTRICAL CONSTRUCTION

GREENLEE KNOCKOUT PUNCHES



Permits easy enlarging of knockouts and cutting of smooth, round holes in metal, hard rubber or bakelite up to ⅛" thick.

No. 735 KNOCKOUT PUNCH SET

Set consists of 4 punches to cut holes for ½", ¾", 1", and 1¼" conduit. Packed in leather case.

LIST PRICE	WEIGHT
$11.60	2½ lbs.

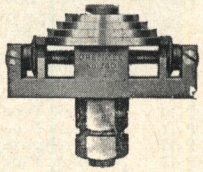
No. 737 KNOCKOUT PUNCH SET

Similar to the No. 735 set, but consists of only two punches to cut holes for 1½" and 2" conduit. Packed in leather case. 12.00 3½ lbs.

KNOCKOUT PUNCHES

No. 738 (2½" Conduit)	**$16.25**	**4½ lbs.**
No. 739 (3" Conduit)	**22.00**	**6½ lbs.**
No. 741 (3½" Conduit)	**43.00**	**10⅜ lbs.**
No. 742 (4" Conduit)	**53.00**	**12⅛ lbs.**

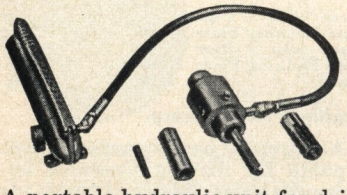
No. 740 KNOCKOUT CUTTER



Companion tool to Greenlee Knockout Punches. Enlarges knockouts to take 1½, 2, 2½, and 3-inch conduit. Packed in leather case.

No. 740 Knockout Cutter Complete. $17.50 4½ lbs.

No. 7646-A Hydraulic KNOCKOUT PUNCH DRIVER





A portable hydraulic unit for driving standard Greenlee Knockout Punches. Driver set is packed in a strong metal case with a compartment provided to store 2" and smaller punches.

	LIST PRICE	WEIGHT
No. 7646 Complete (without punches)	$100.00	20 lbs.

No. 16 UNISPUR ELECTRICIANS' AUGER BIT



A smooth-boring double-twist auger bit with single spur. Fitted with deeply cut, single screw point. Over-all length 10"; twist length 5½".

Size, inches, in 16ths	10	11	12	13	16
Price, each	$2.05	$2.20	$2.30	$2.65	$3.20
Weight, dozen, lbs.	2¾	3¼	3½	4¼	5¼

No. 21 Solid-Center ELECTRICIANS' AUGER BIT



Provides maximum strength for heavy use and positive chip clearance. Made with 5½" twist and 10" over-all length. Single screw point.

SIZE	PRICE EACH	WEIGHT LBS. PER DOZEN
10	$1.65	2½
11	1.85	3
12	1.95	3¼

No. 48 BELL HANGERS' DRILL



Of high-grade alloy steel, heat-treated for additional strength. A 3/32-inch hole is drilled about one inch from point for convenience in pulling wire.

List Price Each—Weight Per Dozen
Size in Thirty-Seconds — Weight in Pounds

18" LENGTH			18" LENGTH			24" LENGTH		
SIZE	PRICE EACH	WT.	SIZE	PRICE EACH	WT.	SIZE	PRICE EACH	WT.
6	$2.10	1¾	16	$3.05	6⅛	6	$2.65	2
8	2.25	2½	18	3.30	6¾	8	2.75	3⅜
10	2.30	2⅞	20	3.70	7½	10	2.85	3⅝
12	2.50	3	22	4.10	7¾	12	3.05	4
14	2.75	3¾	24	5.10	9¾	14	3.30	5⅝
						16	3.60	8

Nos. 900 and 925 BIT EXTENSIONS



No. 900—Strong enough to drive a bit up to 1-inch diameter yet small enough to follow a ⅝-inch size.

LENGTH	15"	18"	21"	24"
LIST PRICE	$4.15	$4.30	$4.40	$4.60
WEIGHT	1 lb.	1⅛ lbs.	1¼ lbs.	1⅜ lbs.

No. 925—Similar to the No. 900, but made extra heavy to follow a 13/16-inch bit and drive tools up to 2-inch size.

LENGTH	18"	24"
LIST PRICE	$5.50	$5.95
WEIGHT	1⅞ lbs.	2¼ lbs.

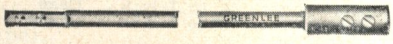
No. 18 UNISPUR ELECTRICIANS' POWER BIT



A fast-boring, double-twist auger bit especially designed for electric drill use, having a twist length of 5½", a shank dia. of 23/64", and length of 8½".

SIZE	PRICE EACH	WEIGHT DOZEN	SIZE	PRICE EACH	WEIGHT DOZEN
11/16"	$2.60	3¼ lbs.	14/16"	$3.20	4¾ lbs.
12/16"	2.70	3½ lbs.	16/16"	3.50	5¼ lbs.
13/16"	3.00	4½ lbs.			

No. 902 POWER BIT EXTENSION



Made in 18 and 24-inch lengths for use in electric drills. Takes bits with 23/64" shanks.

SIZE	LIST PRICE	WEIGHT
18"	$2.35	10½ oz.
24"	2.50	14 oz.

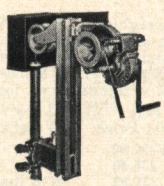
No. 902-1 BRACE ADAPTER



Permits the use of No. 18 Power Bit, or the No. 902 Bit Extension in any standard brace. It is 4½" long and takes shanks 23/64".

LIST PRICE $1.80 WEIGHT 3 oz.

GREENLEE CABLE PULLER



A simple, compact unit which exerts up to 7500 lbs. pull. Two speeds. Clamping device fastens directly to conduit—allows pulling in line with conduit, prevents hanger loosening. Attachment for pulling from concealed conduit, extra.

No. 765 Cable Puller
List Price $215.00 Weight 225 lbs.

HENDERSON PATENT E Z CONDUIT BENDERS FOR STANDARD CONDUIT

SHELL TYPE



The ½", ¾" and 1" sizes may be used either as hickeys or stationary benders.

The three larger sizes, 1¼", 1½" and 2", are for stationary bending only.

Our E Z Bender will make any bend in exactly the right place, with the least effort, and in a fraction of the time usually required.

The original and patented design of a deep, close fitting bending groove, see cuts, automatically grips the conduit and absolutely prevents kinking, flattening and slipping.

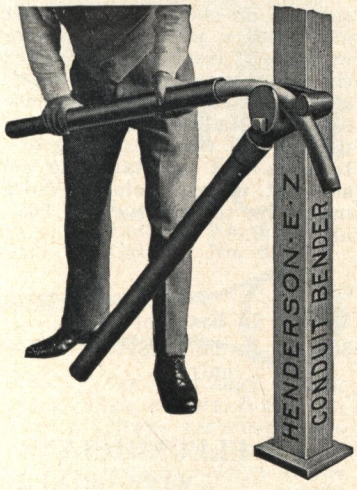
Many thousands of our Henderson E Z Conduit Benders are in use by contractors, central stations, industrial plants and railroads throughout the United States.

PRICE LIST

	Size	Price
EZ-1	½"	$ 2.64
EZ-2	¾"	3.30
EZ-3	1"	6.60
EZ-4	1¼"	13.20
EZ-5	1½"	19.80
EZ-6	2"	26.40

HANDLES ARE NOT FURNISHED

BEND THE BIG CONDUIT BY HAND TOO



With the HENDERSON PATENT E Z CONDUIT BENDER one man can easily bend 1¼" conduit; two men, 1½" conduit and three men, 2" conduit.

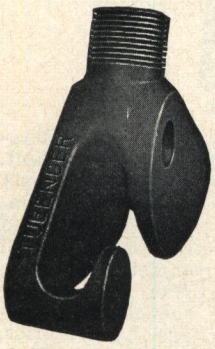
The illustration shows how short lengths of conduit can be used as elbows — that makes a worth-while saving.

The E Z is saving thousands of dollars daily on conduit jobs—saving time and men's strength. It will pay for itself the first time used.

HENDERSON PATENT TUBENDER

for Thin Wall Conduit

SHELL TYPE



Will bend the new thin wall conduit without kinking or flattening. The TUBENDER has all of the advantages of our Henderson Patent E Z Conduit Bender, including the side outlet, which makes it possible to take out the conduit to check the bends at any time.

There are deep, snug fitting bending grooves, both on the front extension and the rear. The rear groove is extended so as to give the conduit proper support during the bending operation, a patented feature. The grooves are shaped and the bending elements are spaced so as to give ample support to the conduit while it is being bent, keeping it circular in shape instead of being flattened.

You will find it to be a first-class conduit hickey which will give you entire satisfaction in bending the new Electrical Metallic Tubing.

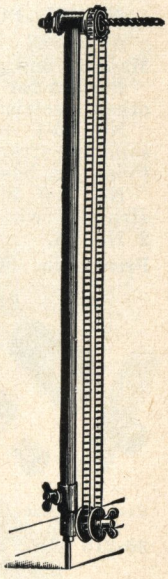
Handles are not Furnished

	TU-1 (½")	TU-2 (¾")	TU-3 (1")	TU-4 (1¼")
List Prices	$2.64	$3.30	$6.60	$10.60
Standard Package	10	5	2	1

HENDERSON PATENT JOIST BORING MACHINE

The Original - The Simplest - The Best

THOUSANDS IN USE



A light running, strongly built tool for the rapid and easy boring of overhead joists. Stands on the floor, and is adjustable to ceilings of different heights and collapsible to easy carrying length. Ball bearing bit head with a two piece chuck for standard auger bits. Floating chain drive. We have manufactured this machine for over 40 years, and know it has increased profits and cut down labor costs for many thousands of contractors in all parts of the United States.

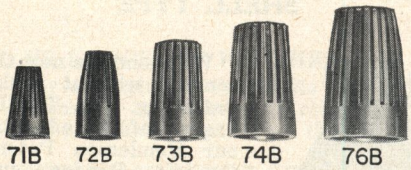
FULLY GUARANTEED

LIST PRICE $39.60

IDEAL "WIRE-NUTS"

SOLDERLESS-TAPELESS WIRE CONNECTORS

Underwriters' Approved



1. Strip wire. 2. Screw on—that's all. "Wire-Nut" threads on to wire just like a nut on a bolt. The coil shaped spring insert presses (does not cut) clean threads into the stripped wires as the Connector is applied. Wires are tightly compressed and automatically twisted together by powerful grip. Molded composition shell completely protects against shorts, grounds and corrosion such as develop in loose solder and tape connections. Millions in use. Listed by Underwriters' Laboratories, Inc. Sizes 74B and 76B approved as 600 Volt Pressure Cable Connectors for general use. Other sizes approved for 300 Volt use. A size for every need—solid or standard.

Cat. No.	Size		Price Per 100	Price Per 1000
30-015	71B	No. 16 & No. 18 up to 3 No. 18; 1 No. 16 & 1 No. 18	——	——
30-016	72B	No. 14, 16 & 18 AWG up to 1 No. 14 and 1 No. 16—2, 3, or 4 No. 18	——	——
30-017	73B	No. 14, 16 & 18 AWG up to 2 No. 14 and 1 No. 18 or 5 No. 18...	——	——
30-018	74B	No. 12, 14, 16 & 18 AWG up to 2 No. 12 and 1 No. 18; 4 No. 14 and 1 No. 18	——	——
30-019	76B	No. 10, 12, 14, 16 and 18 AWG up to 3 No. 10 with 1 No. 18; 4 No. 12 with 2 No. 18; 6 No. 14 with 2 No. 18	——	——

EXCEL PORCELAIN WIRE CONNECTORS

Approved by Underwriters' Laboratories, Inc. Made in one piece, high grade porcelain.

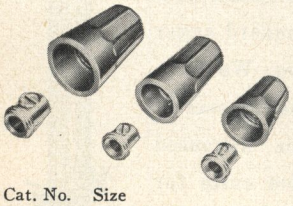
Perfect for roughing in fixture hanging and many other electrical connections.

No. E-1 30-025 joins combinations of A.W.G. solid and stranded wires up to and including 3 No. 18. Price, No. 30-025 (Bulk only)—per 1000 .... ——

No. E-3 30-008 joins combinations of solid and stranded wires up to and including 2 No. 18 and 2 No. 14.

Price, No. 30-008—per 100 ——; per 1000 ——

SET SCREW CONNECTOR



No. 11 and No. 22 listed by Underwriters' Laboratories for 600 volt pressure cable connectors. No. 10 listed as a 300 volt connector for fixture hanging and appliance wiring.

Cat. No.	Size		Price Per 100	Price Per 1000
30-210	10	2 No. 14—4 No. 16—5 No. 18 or combinations ..	——	——
30-211	10	2 No. 12—3 No. 14	——	——
30-222	22	2 No. 10—3 No. 12—6 No. 14 or combinations ..	——	——

IDEAL CRIMP CONNECTOR

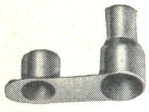
with

"WRAP-CAP" INSULATOR

Underwriters' Approved







CRIMP SLEEVE—Made of steel for maximum strength, cadmium plated for corrosion resistance. Gives greater holding power than any other crimp connector used for pigtail splices. Fully approved with the "Wrap-Cap" Insulator or with tape. Handles all wire combinations from No. 14 through No. 10. Also has fixture connector approval. Compact, strong, vibration-proof.

Cat. No.		Price Per 100	Price Per 1000
30-410	In boxes of 100	——	——
30-510	In bulk carton of 1000 only	——	——

"WRAP-CAP" INSULATOR—Assures perfect insulation on every connection. It never varies—actually gives a joint that is better insulated than the wire itself! Insulates between the wires—with double thickness over sleeve and wire ends. Deep skirt insures greater safety, even when wires are not evenly stripped. Made of the same vinyl insulating material used in TW wire, providing excellent ageing characteristics and resistance to corrosive atmospheres, sunlight, water, alcohol and even gasoline. Listed for maximum temperature of 165° F., easily workable at –10° F.

Cat. No.		Price Per 100	Price Per 1000
30-415	In boxes of 100	——	——
30-515	In bulk carton of 1000 only		——

ELECTRICIANS' PLIERS

WITH CRIMPING DIE

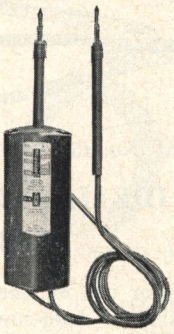


8½" Electricians' Pliers with special crimping die—eliminates the need for the special crimping tool. New England nose easily gets into hard-to-reach places, can be used for twisting wires and burring conduit. A single crimping die, for use with IDEAL Crimp Connectors, is located at the point of maximum leverage, makes a double indentation—causes copper in wires to cold-flow in all directions for exceptionally strong mechanical joint. Special plastic grips give comfortable, powerful hold. Pliers are unconditionally guaranteed against defects in workmanship and material.

Catalog No. 30-420 ..... Each ——

Prices on Application

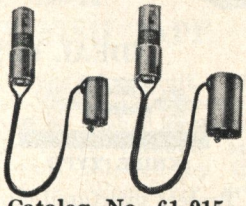
IDEAL VOLTAGE TESTER



Tests 110 to 600 volts AC/DC, blown fuses, grounded side of lines or motors, excessive leakage to ground, frequency (25 or 60 cy.) D.C. polarity. Double protection provided by solenoid voltage indicator and a neon test lamp—either will function in event other fails. Special features include: Space for prod storage, moisture-proof, molded rubber prod handles with "no-slip" safety rings; handy center-mount for either prod. Case is double-strength, seamless plastic with covered, fog-free window. Special layer-wound coil on nylon spool is firmly secured at both ends. Plastic nameplate is bonded to case—no metallic contacts between inside and outside of case. Available with or without carrying case.

Cat. No.	Description
61-004	..... Tester with Carrying Case
61-005	..... Tester only
61-006	Tester with one test prod and special insulated clamp. Without Carrying Case.
61-007	Tester has all of the safety features of regular units, plus special current limiting resistors in each test prod. Current in the leads limited to a maximum of 1 ampere at 250 V., protects operator from danger resulting from accidental shorts or breakdowns. Even with infinite-buss source, the arc drawn from a short at 250 volt-amperes would not endanger either personnel or equipment. With Carrying Case.

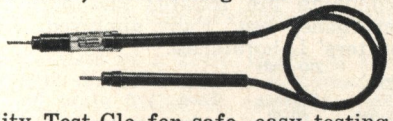
FLUORESCENT FIXTURE TESTER



Pocket-size Flur-Test tells you whether trouble is in fixture circuit, starter or tube. Plugs into starter socket. Two models available—for 15-40 watt tubes and for 85-100 watt tubes. For fixtures with starter behind tubes order extra adapter.

Flur Test (14-40 watt) ..... **Catalog No. 61-015**
Flur Test (85-100 watt) ..... **Catalog No. 61-016**

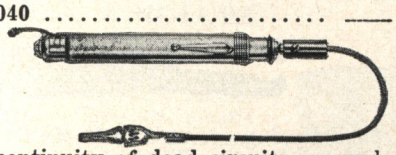
IDEAL TEST GLO



Industrial quality Test-Glo for safe, easy testing of electrical circuits, spark-plugs, motors, fuses, etc. High-grade resistors reduce voltage reaching leads. Long thin handles permit deep probing and have "no-slip" safety rings. Neon lamp is always in line of vision. 24" lead wire (rated 10,000 v.) permits wide span. Cement-sealed and moisture proof. For 80 to 600 v. AC or DC.

Catalog No. 61-040 .....

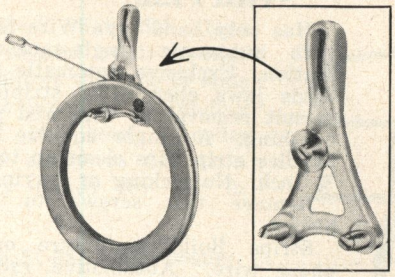
CONTINUITY TESTER



For checking continuity of dead circuits, grounds on conduit systems, identifying wires in multi-wire cables, control equipment, panel-board wiring and a hundred other uses. Requires two pen-lite batteries (not furnished) and gives light signal to indicate completed circuit. Has 4 foot removable cord with alligator clip. Only 5½" long, weight 3 oz. Fits pocket like fountain pen.

Catalog No. 61-030 Tester (less batteries) .. ____

IDEAL FISH TAPE WINDERS

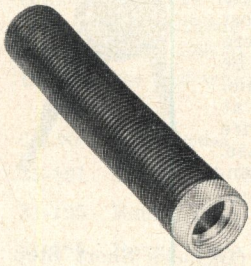


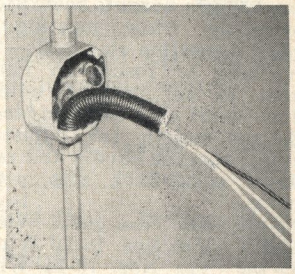
A new tool designed to make the Ideal Fish Tape Reel and Puller still easier to use. As the Winder handle is pulled around the Reel, a wheel spreads the reel housing and allows the fish tape to wind or unwind with least effort. The fish tape, coiling or uncoiling freely within the reel, is easier to handle and can be reeled in or out with far less work.

THREE SIZES—FOR ALL IDEAL FISH TAPE REELS

Cat. No.		Price Ea.
31-180	For Reels No. 31-007 & 31-008	____
31-181	For Reels No. 31-009, 31-016, 31-191 & 31-211	____
31-182	For Reel No. 31-011	____

WIRE GUIDES



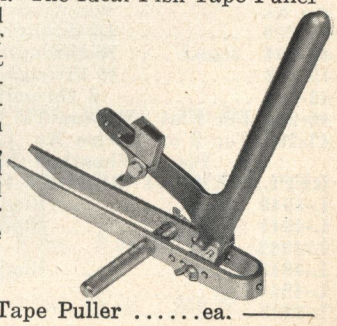


No skinned knuckles, no skinned wires—Wire Guides help prevent kinks and let several conductors slide into conduit smoothly and easily. Tempered steel spring forms smooth bend for wire to follow. Knurled aluminum fitting can be used with all types and sizes of boxes, in any position—with plaster rings on or off. Spring will not slip off under pull, yet can be removed with single twist. Sold in sets of 4 assorted sizes or individually. No bushing is necessary with ½" size.

Cat. No.	Size	Price Ea.
31-230	Set of four sizes	____
31-231	½ inch	____
31-232	¾ inch	____
31-233	1 inch	____
31-234	1¼ inch	____

FISH TAPE PULLER

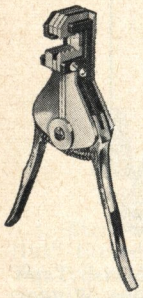
Mechanical advantage of 2½ times for tough pulling jobs. Tapes "frozen" into conduit can be readily freed with this new tool. The Ideal Fish Tape Puller pulls the tape and presses the box or other outlet firmly against wall or structural member—no chance of pulling outlet loose. Can be used in outlet boxes, fuse boxes, large pull boxes, large & small conduits — wherever there is a tough wire pulling job.



Cat. No. 31-185 Fish Tape Puller .....ea. ____

Prices on Application

IDEAL STRIPMASTER WIRE STRIPPERS



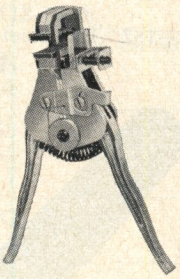
Has only hand type Wire Stripper with automatic single-squeeze operation. Exclusive automatic feature holds jaws open after stripping to permit removal of wire and prevent crushing. A single squeeze of the handles strip wire clean up to a full ⅞ inch. No nicking or fraying.

Remove two screws to change blades.

Strips Building, fixture or telephone wire. Automotive, radio and aviation wire, also FM and TV down lead wire.

Cat. No.	Wire Ga.	Wt.	Price Ea.
45-090	8 to 10	10 oz.	——
45-091	10 to 18	10 oz.	——
45-092	10 to 22	10 oz.	——
45-093	16 to 22	10 oz.	——
45-095	For posJ wire		——
45-097	16 to 26	10 oz.	——

TEFLON WIRE STRIPPER



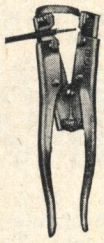
Teflon is as easy to strip as any other insulation with this stripper. Unique blade construction and extreme holding power of broad jaws permits fast, accurate stripping while meeting most rigid inspection standards—where marking of insulation must be kept to an absolute minimum. Just insert wire between blades at desired length (or adjust wire stop), squeeze handle and release. Jaws snap back into position.

Cat. No.	Description
45-170	For Nos. 10-14 Wire
45-171	For Nos. 16-26 Wire
45-180	For Nos. 10-14 Wire (Includes Short Stop Latch and Transparent Wire Stop)
45-181	For Nos. 16-26 Wire (Includes Short Stop Latch and Transparent Wire Stop)

REPLACEMENT BLADES AND ACCESSORIES

L-5210	Blades for 45-170, 180
L-5211	Blades for 45-171, 181
L-5269	Short Stop Latch
L-5270	Transparent Wire Stop

IDEAL AUTOMATIC E-Z WIRE STRIPPER



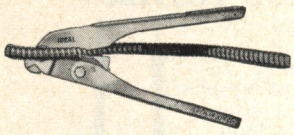
For stripping standard lamp and fixture wire, automotive wire and all other stranded wire. Provided with a lever to stop the return of the arms until the wire is removed after stripping. This prevents crushing of stranded wire by returning stripper arm. Also, suitable for stripping solid wires.

Cat. No.	Wire Gauge No.	No. of Holes
45-200	16 through 26	6
45-201	10 through 18	5
45-202	10 through 22	6
45-203	8 through 14	4
45-204	For Flat 300 Ohm TV Downlead	
45-205	For 2 or 3-Wire No. 12 and 14 Non-Metallic Plastic Sheathed Cable (UF Cable).	

REPLACEMENT BLADES FOR E-Z STRIPPERS

L-4940	Blades for 45-200, 024, 029
L-4941	Blades for 45-201, 026, 031
L-4942	Blades for 45-202, 078
L-4943	Blades for 45-203, 027, 032
L-4944	Blades for 45-204, 087
L-4945	Blades for 45-205

IDEAL BX ARMOR CUTTER



Cuts BX Armor of any make, two or three wire, in one operation. Hardened steel cutting blade is removable for sharpening or replacement.

Cat. No. 45-079 BX Armor Cutter ..... ea. ——

IDEAL CABLE RIPPER AND WIRE GAUGE



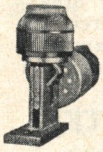
For use on non-metallic sheathed duplex cable or lead-covered cable where outside diameter is ⅝ inches or smaller.

Cat. No. 45-018 ..... ea. ——

IDEAL FUSE CLIP CLAMPS

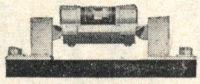
Eliminate unnecessary watt loss, fuse and fuse clip replacement. Assure proper alignment and positive contact between fuse and clips. The seven sizes listed provide for all possible requirements.



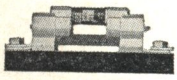


Cat. No.	Size, Amps. 250 V.	Size, Amps. 600 V.	Std. Pkg.	Price Each
		Ferrule Type		
32-001	30	—	12	
32-002	60	30	12	
32-003	—	60	6	
		Knife Type		
32-004	100	100	6	
32-005	200	200	6	
32-006	400	400	6	
32-007	600	600	6	

IDEAL FUSE REDUCERS



KNIFE TYPE



FERRULE TYPE

Protect overfused circuits without expense of special fuses, change in switch panel or equipment. Eliminate fire hazards and burnouts. Handy for emergency use. Fully approved. Listed by Underwriters' Laboratories.

250-Volt Cat. No.	Ampere	Price Each	600-Volt Cat. No.	Ampere	Price Each
33-001	60-30	.....	33-025	60-30	.....
33-002	100-30	.....	33-026	100-30	.....
33-003	100-60	.....	33-027	100-60	.....
33-006	200-100	.....	33-030	200-100	.....
33-010	400-200	.....	33-034	400-200	.....
33-015	600-400	.....	33-039	600-400	.....

Other sizes and prices upon request.

IDEAL "SAFE-T-GRIP" FUSE PULLERS



Non-slipping—formed to fit the fingers, assuring a positive full grip. Eliminates danger of pulling or replacing cartridge fuses by hand. Also suitable for use to adjust loose cutout clips, handling laboratory test tubes, live electrical parts, etc. Laminated fibre construction.

Cat. No.	Size	Length	For Fuse Diams.	List
34-001	Midget	5″	¼″ to ½″	
34-002	Pocket	7½″	½″ to 1½″	
34-003	Giant	12″	1″ to 2½″	

Prices on Application

IDEAL FISH TAPE REELS AND PULLERS



Invaluable for building construction and industrial work. Reel serves as handle to give firm grip in pulling on fish tape, eliminating special pullers, or dangerous bare-hand pulling.

Saves 50 per cent of the workman's time. Keeps tape fully protected. Tape is locked in reel when not in use and can not spring loose.

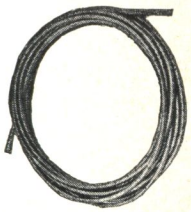
Cat. No.	Length & Size of Tape	Price Ea.
31-007	50 ft. x ⅛ x .045 (3/64″)	———
31-008	50 ft. x ⅛ x .060 (1/16″)	———
31-009	100 ft. x ⅛ x .060 (1/16″)	———
31-011	100 ft. x ¼ x .060 (1/16″)	———
31-016	200 ft. x ⅛ x .060 (1/16″)	———

IDEAL FISH TAPES

Highest grade tempered spring steel is used. No curling. Flexible and easy to use on long runs of conduit having several bends.

Cat. No.	Length & Size of Tape	Price Ea.
31-004	50 ft. x ⅛ x .060 (1/16″)	———
31-036	100 ft. x ⅛ x .060 (1/16″)	———
31-038	200 ft. x ⅛ x .060 (1/16″)	———
31-050	100 ft. x ¼ x .060 (1/16″)	———
31-052	200 ft. x ¼ x .060 (1/16″)	———
31-078	50 ft. x ⅛ x .045 (3/64″)	———
31-079	100 ft. x ⅛ x .045 (3/64″)	———

IDEAL COIL-FLEX FISH TAPE



For all types of conduit. The Ideal Coil-Flex is extremely flexible; can be pushed or pulled with little effort through any and all bends allowed by the electrical code. Positively prevents cutting or damaging of aluminum. Ends are smooth and round to avoid catching or snagging.

The Coil-Flex consists of a 25-ft. length of steel spring 11/32 inch in diameter with a rustproof inner steel cable. A male fitting on one end and a female fitting on the other makes it easy to join together two or more lengths for jobs requiring a longer tape. Easy on the hands, it gives a safe, positive grip. Every Coil-Flex is factory inspected and tested at 400 pounds pull.

Cat. No. 31-081 25-ft. length ..... each ———

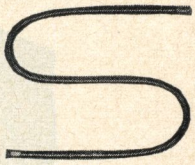
IDEAL WIRE-LUBE



Makes wire pulling easier and saves time. Protects insulation against breaks and strains. It can be used on rubber, lead or plastic covered wire or cable. The lubricant may be applied by hand or brush. Wire or cable actually "rides" on a film of Lubricant which dries to a fine powder. Ideal for use when adding extra wires in a conduit already containing wires.

Cat. No. 31-251 Gal. size ..... ea. ———
Cat. No. 31-250 Quart size ..... ea. ———

IDEAL FISH TAPE LEADER



"Guides" flat fish tape easily around bends in conduit—allows the tape to slide without jamming or binding around 90° bends. Leader fastens easily to flat tape. Factory tested for 400 lb. pull.

Cat. No. 31-082 20″ Leader ..... each ———
Cat. No. 31-083 Fish Tape Ball ..... each ———

IDEAL ROUND FISH TAPE



Made especially for use in small conduit (½″ and less). Round Fish Tape easily goes through small radius bends. Has less friction-resistance than flat tapes so it can be readily pushed or pulled through conduit. Because it is round, it rolls onto a reel without kinking or binding. Tape is .080-in. diameter and has Fish Tape Ball on one end which lets it swivel and turn.

Cat. No.	Description	Shipping Wt. (lbs.)	Length	Price Ea.
31-191	Tape with Reel	5	100 ft.	———
31-195	Round Tape & Ball	1½	50 ft.	———
31-196	Round Tape & Ball	3	100 ft.	———
31-197	Round Tape & Ball	5½	200 ft.	———
31-084	Fish Tape Ball for Round Tape			———

NYLON COVERED FISH TAPE

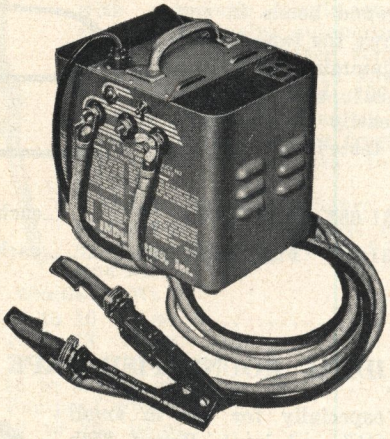


Nylon-insulated Round Fish Tape gives more protection to workmen and equipment than bare fish tape when pulling new wires into live panel boards, switches and other "hot" equipment. Wire is .080″ in diameter and nylon is .020″ thick. For easy turning and swiveling, tape has special Fish Tape Ball.

Cat. No.	Description	Shipping Weight	Length	Price Ea.
31-211	Nylon Covered Tape & Reel	4 lbs., 12 oz.	100 ft.	———
31-215	Nylon Covered Tape & Ball	1 lb., 9 oz.	50 ft.	———
31-216	Nylon Covered Tape & Ball	2 lbs., 9 oz.	100 ft.	———
31-217	Nylon Covered Tape & Ball	4 lbs., 10 oz.	200 ft.	———

Prices on Application

IDEAL "THERMO-GRIP" SOLDERING TOOLS



Operates on resistance heating principle. Heats instantly, concentrating heat on part to be soldered, eliminates fire hazard and danger of melting nearby joints — does not oxidize tin in solder, weaken it, or discolor finished job. Thumb switch for heat control, all parts fully insulated, low voltage operation. Set consists of combination power unit, carrying case, secondary lead assembly one or more attachments, such as Plier Attachment, which heats work in jaws; Fork Attachment, for restricted places; Pencil Attachment, for spot and seam soldering.
WHEN ORDERING specify (1) Power Unit (2) Secondary Leads (3) Attachments desired.

1,000-WATT MODEL AND ATTACHMENTS

Cat. No.	Description	Price
12-062	Power Unit, 115V, 50-60 Cy.	$——
12-066	Secondary Lead Assembly	——
12-067	Plier Attachment	——
12-068	Fork Attachment	——
12-069	Pencil Attachment	——

450-WATT MODEL AND ATTACHMENTS

(Attachments are identical to 1,000-watt except proportionately smaller in size)

12-072	Power Unit, 115V, 50-60 Cy.	$——
12-076	Secondary Lead Assembly	——
12-077	Plier Attachment	——
12-078	Fork Attachment	——
12-079	Pencil Attachment	——

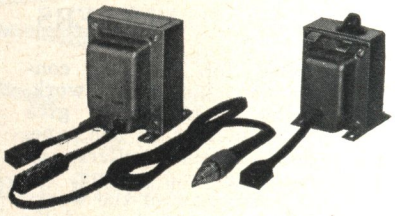
IDEAL ELECTRIC ETCHERS



The Universal Etcher illustrated is portable. Marks iron, steel and their alloys, such as tools, parts and material. Depth of mark is governed by speed of movement and by heat switch, leaving a permanent mark. Four etching heats—120, 240, 420 and 700 watts—give a wide range of marking control. Cover forms work plate for small tools and parts. Unit includes 4 oz. etching tool, ground clamp with 4′ leads size, 8⅝″ x 5⅝″ x 7. Shipping weight 19 lbs.

Cat. No.	Description	Price Ea.
11-009	Standard, 115 v., 50-60 cy.	$——
11-048	Machine Shop, 115 v., 50-60 cy.	——
11-081	Universal, 115 v., 50-60 cy.	——

THERMO-TIP SOLDERING TOOL



For soldering electronic circuits and parts, instruments, Radio and TV work in production or repair. Heats instantly — concentrates heat, only on the part to be soldered.

Cat. No.	Description	Price Ea.
12-123	250 Watt Power Unit	——
12-124	125 Watt Power Unit	——

The soldering pencil is small and light, making it ideal for confined work.

12-141	⅛″ Single Carbon Attachment	——
12-142	.062 Single Metal Attachment	——
12-155	3/16″ Double Carbon Attachment	——
12-156	⅛″ Double Carbon Attachment	——
12-157	.062 Double Metal Attachment	——

Chisel Tip Irons are also available.

IDEAL ELECTRIC ETCHERS

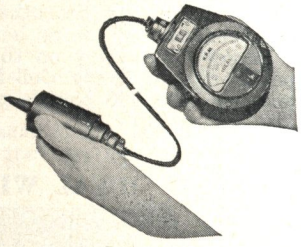
IDEAL ELECTRIC MARKER



Marks any material — glass, metal, ceramics, etc., light weight but built for rugged, industrial use. Vibrator type—7200 strokes per min. Stroke and impact easily adjustable. For average marking, order with alloy point. For marking extra hard material (50 to 64 Rockwell, Scale C), order with diamond point.

Cat. No.		Price Ea.
11-100	With alloy point, 115 v, 60 cy	——
11-101	With diamond point, 115 v, 60 cy	——
L-2180	Extra alloy point	——
L-2647	Extra diamond point	——

IDEAL ELECTRIC TACHOMETER



Gives accurate check on production speeds. Two sizes for speeds up to 5000 r.p.m. Accurate to plus or minus 1 per cent of full scale deflection.

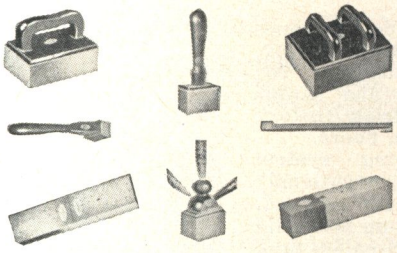
Consists of small generator coupled to electric meter, which is capable of withstanding a momentary overload up to four times the maximum speed.

The meter has two scales — "high" and "lo" easily changed from one to the other with a switch. The units may be used together as a "Hand Type" Tachometer, or for many applications including permanent mounting. Weight 3 lbs.

Cat. No.	Description	Wt. Lbs. Each	Price Ea.
50-001	0-2500 r.p.m.	3	——
50-002	0-5000 r.p.m.	3	——

Prices on Application

IDEAL COMMUTATOR RESURFACERS



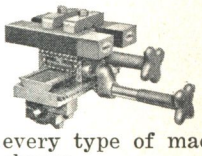
Eliminates Ridges, Grooves, and Pits

Hand Type Resurfacers are used by simply holding the Resurfacer against the commutator and moving it from side to side as the motor turns over, under its own power. Ideal Resurfacers are made in many sizes and grades.

Specifications and Prices on Request.

IDEAL PRECISION GRINDERS

For Commutators and Slip Rings



Portable. For truing commutators and slip rings in their own bearings at normal operating speeds. Accurate to 1/1000 inch. New bracket supports make possible use on practically every type of machine. Carrying case at no extra charge.

Specifications and Prices on Request.

IDEAL FLEXIBLE ABRASIVE

A fine grain, non-dusting abrasive serves as a Commutator Cleaner and burnisher. It is non-conductive and non-loading.



		Price
82-001	⅜ x ½ x 5	ea. $———
82-002	⅜ x ¾ x 5	ea. ———
82-003	⅝ x 1 x 5	ea. ———

IDEAL BRUSH SEATER



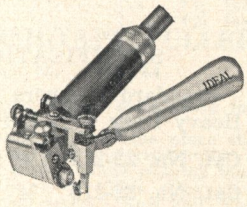
For seating carbon-graphite or metal composition brushes. Will not remove or scratch copper. Available in 11 sizes. Standard size 4¾ x 1⅛ x ⅝.

Catalog No. 23-008 (4¾ x 4⅛ x ⅝) .... $———

IDEAL MICA UNDERCUTTERS

Universal Model — For field and shop use—heavy duty service. Cuts to within ¼" of Riser. Works in space only 2¾" wide. Used without removing brush rigging.

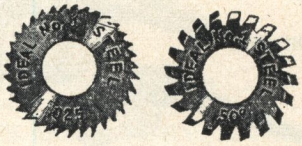
Shop Model Undercutter —For use on commutators removed from the machine.



Direct Drive Undercutter—Compact, weight complete only 5¾ pounds. Undercuts without removal of brush rigging. Cuts to within 1/16" of Commutator riser.

		Price
No. 25-029	Universal 115V, 50/60 C.	$———
No. 25-038	Shop Model 115V, 50/60 C.	———
No. 25-001	Direct Drive 115V, 50/60 C.	———

IDEAL COMMUTATOR SLOTTING SAWS AND MILLING CUTTERS



Made of special high speed steel. Available in all types and sizes. Prices on request.

IDEAL COMMUTATOR SLOTTING FILES

Specially designed for commutator use. Extremely hard, fast-cutting and long lived. Tapered and curved to allow for rocking motion.

No.	Description	Price
1	Straight Edge Cat. No. 20-012	$———
2	Knife Edged Cat. No. 20-013	———
3	8" Double End Cat. No. 20-007	———
4	7" Double End Cat. No. 20-008	———
5	Single End Cat. No. 20-009	———

IDEAL COMMUTATOR CEMENT

A non-conductor, regardless of age. Highly adhesive. When once dry it stays in place and will not shrink.



½ lb. Can Cat. No. 54-007 .... $———
1 lb. Can Cat. No. 54-008 .... ———

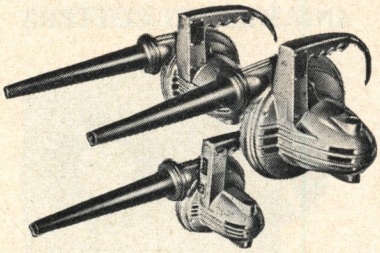
IDEAL BRUSH SEATER

For seating carbon-graphite or metal composition brushes. Brush is accurately seated under operating conditions, without shutting down the machine. 5 sizes available. Prices on request.

Cat. No. 23-008 (4¾" x 1⅛" x ⅝" face) .... $———

Prices on Application

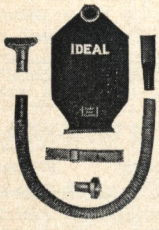
IDEAL HAND TYPE CLEANERS



Developed through years of air-engineering experience, the improved Ideal Cleaner will do a better job, faster, at less cost. These light weight, perfectly balanced cleaners handle a wide range of work. Blows, vacuums and sprays. Can be operated continuously at peak efficiency and with amazing economy.

Delivers air at higher velocity (Heavy Duty Model—26,500 feet per minute) yet, because it blows only dry air at low pressure the Ideal Cleaner does not harm even delicate equipment. Blower Nozzle is furnished as standard with Ideal Hand Type Cleaners.

Cat. No.	Description	Price Ea.
22-110	Heavy Duty Model (1 1/3 H.P.)	———
22-113	Medium Duty Model (2/3 H.P.)	———
22-163	Light Duty Model (½ H.P.)	———



STANDARD ATTACHMENTS FOR USE WITH HAND TYPE CLEANERS

Dust-proof bag, hose connection (inlet side), flexible hose (4 ft. x 1½ inches), metal nozzle (5 inch) and brush, flat fibre nozzle and shoulder strap.

Cat. No. 22-109 Std. Attachment Set ... ea.———

IDEAL CONVERSION PACK

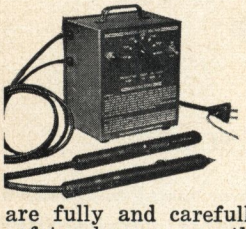
Convert your Ideal Blower into a Tank Cleaner with the Conversion Pack. Consists of 12-gallon tank and dust-tight bag. Adaptable to any of the following:



Heavy Duty Models:
Nos. 22-110, 22 111, 22-112
Medium Duty Models: Nos. 22-113, 22-114, 22-115

Cat. No. 22-216 ..... ———

IDEAL INSULATION TESTER

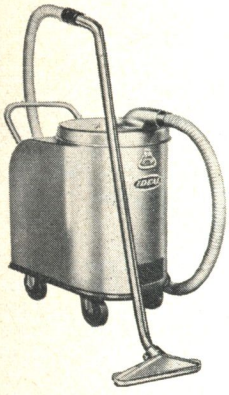


Detects grounds, shorts and broken wires. Tests up to 2500 volts. Seven test voltages: 500, 1000, 1250, 1500, 1750, 2000, and 2500.

Operates from any electrical outlet. All current carrying parts are fully and carefully insulated. Spring operated safety sleeves, over the test points, which can only be bared by pressing forward the buttons on side of handles. Has three wire safety type cord. Rating 600-volt amp. (maximum).

Cat. No. 41-001 115 v., 50-60 cy. ..... ———

IDEAL TANK-TYPE CLEANER



Ideal Tank-Type Cleaner—for better, faster cleaning. Particularly valuable for scrap collection and in removing water from factory or service station floors.

Unique filtering system eliminates the (conventional) external bag. Easily emptied. Remove the vacuum sealed lid and lift out the 9-gallon tank and dust bag.

Cleaner has large 5-inch wheels. Swivel wheels in the front. Small width clearance permits the Cleaner to be moved down narrow aisles. Low center of gravity makes it difficult to upset.

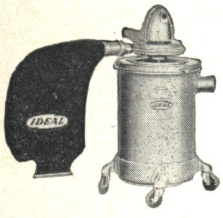
The 1⅓ H.P. motor provides ample power without overheating. Complete with 30-foot cord and a handy storage compartment for attachments.

ORDER ATTACHMENTS SEPARATELY

Cat. No.	Description	Price Ea.
22-200	Tank Cleaner Only, 115 v., AC-DC	———
22-201	Tank Cleaner Only, 230 v., AC-DC	———

IDEAL STANDARD TANK CLEANER

Tank Cleaner, Hand Cleaner and Blower All in One



Here is the answer to cleaning requirements for industrial, and commercial establishments, theatres and institutions. Does the work of two or more ordinary Cleaners. Used as a Tank Cleaner, it picks up dirt, dust and metal particles. Quickly removes water from floors after scrubbing and it is especially valuable in scrap collection. The power unit is a complete unit in itself. Removed from the tank it becomes a powerful, hand-type vacuum cleaner or blower.

SPECIFICATIONS UPON REQUEST

Standard Cleaners are available in two models: Heavy Duty (1⅓ H.P.) & Medium Duty (⅔ H.P.).

Cat. No. 22-210 1⅓ H.P., 115 v., AC-DC ———
Cat. No. 22-213 ⅔ H.P., 115 v., AC-DC ———

ORDER ATTACHMENTS SEPARATELY

IDEAL TANK CLEANER ATTACHMENTS

Standard Set of Attachments complete for either of the above Tanks. Cat. No. 22-217. ..... ———

Many other special attachments available.

Prices on Application

MATHIAS KLEIN & SONS

KLEIN'S SIDE CUTTING PLIER

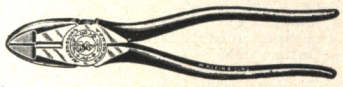


No. 201

Cat. No.	Size	Av. Weight Per Doz.
201-5	5-inch	3 lbs.
201-6	6-inch	5¼ lbs.
201-7	7-inch	7¼ lbs.
201-8	8-inch	11¾ lbs.
201-9	9-inch	14 lbs.

KLEIN'S SIDE CUTTING PLIER

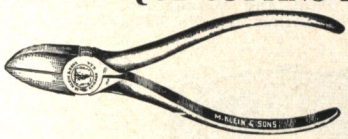
N.E. Type ("Stream-lined")



No. 201-N.E.

Cat. No.	Size	Av. Weight Per Doz.
201-5 N.E.	5-inch	3 lbs.
201-6 N.E.	6-inch	5¼ lbs.
201-7 N.E.	7-inch	7¼ lbs.
201-8 N.E.	8-inch	11¼ lbs.
201-9 N.E.	9-inch	13½ lbs.

KLEIN'S OBLIQUE CUTTING PLIER



No. 202

Cat. No.	Size	Av. Weight Per Doz.
202-5	5-inch	3¾ lbs.
202-6	6-inch	4 lbs.

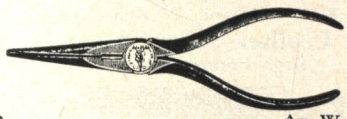
KLEIN'S OBLIQUE CUTTING PLIER



No. 220

Cat. No.	Size	Av. Weight Per Doz.
220-7	7-inch	7 lbs.

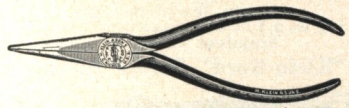
KLEINS LONG NOSE, SIDE CUTTING PLIER



No. 203

Cat. No.	Size	Av. Weight Per Doz.
203-5	5-inch	3¼ lbs.
203-6	6-inch	3¾ lbs.
*203-7	7-inch	4¼ lbs.

KLEIN'S LONG NOSE PLIER, WITHOUT CUTTERS



No. 301

Cat. No.	Size	Av. Weight Per Doz.
301-5	5-inch	3¼ lbs.
301-6	6-inch	3¾ lbs.
*301-7	7-inch	4¼ lbs.

KLEIN'S "CHICAGO" FISH-TAPE PULLER



Patent No. 1,628,744

Here is a simple, husky come-along for Fish-Tape.
To engage puller on fish-tape place the tape sideways in slot and give puller a slight forward motion while pushing tape deeper into the slot. (This slips tape under the ratchet wheel.) Now pull. You have a positive grip on the tape. Slide forward on tape to position for new bite. Klein's "Chicago" Fish-Tape Puller grips like a vise—never slips—simple, strong, automatic
Does not injure the tape, 3¾ inches long, can be carried in the pocket.
Saves time and protects the hand.
(We do not supply Fish-Tape.)

Cat. No.	Size	Av. Weight Per Doz.
1629	For Standard Fish Tapes	2½ lbs.
1629-A	Modified for No. 12 Iron Wire	2½ lbs.

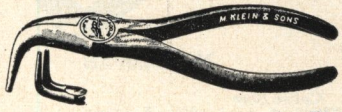
KLEIN'S LONG FLAT NOSE PLIER



No. 305

Cat. No.	Size	Av. Weight Per Doz.
305-6	6-inch Without Cutters	3½ lbs.
206-6	6-inch With Cutters	3½ lbs.

KLEIN'S LONG CURVED NOSE PLIER

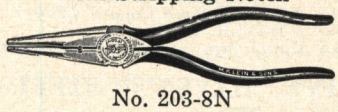


No. 305

Cat. No.	Size	Av. Weight Per Doz.
302-6	6-inch	3¼ lbs.

KLEIN'S HEAVY DUTY LONG NOSE CUTTING PLIER

With Stripping Notch



No. 203-8N

Cat. No.	Size	Av. Weight Per Doz.
203-8N	8-inch	8 lbs.
203-8	8-inch Less Notch	8 lbs.

KLEIN'S KUT HIGH-LEVERAGE PLIER



A quality plier that will cut regular wire and also provide easy cutting of weatherproof hard-drawn copper wire up to No. 2. Can be used for A.C.S.R. Gives necessary high leverage without extra hinging or uncomfortable widespread handles. Weighs no more than regular side-cutting pliers.

Cat. No.	Size
213-9	9 in.

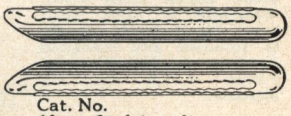
KLEIN'S KUT HIGH-LEVERAGE PLIER N. E. TYPE (Streamlined)



The same as 213-9 shown above, but with the rounded nose and edges characteristic of all Klein N. E. Streamlined side-cutting pliers. Like the 213-9 this N. E. type has the unique high-leverage characteristics that permits cutting through heavy-duty wire with one-hand operatoins.

Cat. No.	Size
213-9 N. E.	9 in.

KLEIN-KOAT PLASTIC COVER FOR PLIER HANDLES



These plastic covers provide a non-skid grip and assure greater comfort when used on Klein Pliers.
Made of transparent plastic in a bright maroon. Simple to apply in a matter of seconds to conform to the shape of the handle assuring a tight grip. Does away with the practice of taping handles.

Cat. No.	
60	to fit 6-in. pliers
70	to fit 7-in. pliers
89	to fit 8- and 9-in. pliers

KLEIN'S ELECTRICIAN'S WAIST BELT

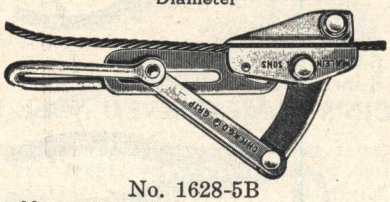
A lightweight belt of genuine harness leather with tool loops and tape thong. May be used with Klein Tool Pockets. Handy for electrician's use.

Cat. No.	Size-Adjustable
5207M	32 to 40 in.
5207L	38 to 46 in.

MATHIAS KLEIN & SONS

KLEIN'S IMPROVED "CHICAGO" GRIP
THE "ALL PURPOSE" TOOL

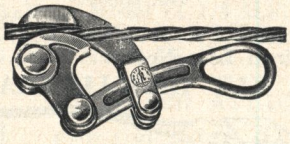
For Messenger, Guy Strand and Conductors up to ½ in. Diameter



No. 1628-5B

Cat. No.	Maximum Cable Size
1628-5B	With bronze lined jaws 4/0 B. & S. 7 (Strand Copper (.522″) 3/0 A.C.S.R. (.502″) Approx. Max. Opening—.58 in. Safe Load—8,000 lbs. Approx. Weight Each—6 lbs. Minimum Cable Size No. 4 B. & S. Solid Copper (.204″) No. 6 A.C.S.R. (.198″)
1628-5	As above but without bronze lining in jaws.

KLEIN'S "HAVEN'S" STEEL GRIPS

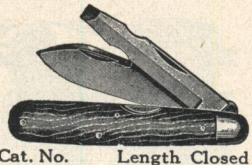


No. 1604-20

Cat. No.	Approximate Max. Opening	Approximate Min. Opening
1604-10	15/64 in. (.24 in.)	1/16 in. (.06 in.)
Description: For No. 4 B & S wire and smaller		
Safe Load: 2500 lbs.	Approx. Weight Per Doz.: 12 lbs.	
1604-20	17/32 in. (.53 in.)	9/64 in. (.14 in.)
Description: For ½ in. wire and smaller.		
Safe Load: 5000 lbs.	Approx. Weight Per Doz.: 30 lbs.	
1625-20	25/32 in. (.78 in.)	7/32 in. (.22 in.)
Description: For wires ¾ in. to No. 2 B & S.		
Safe Load: 8000 lbs.	Approx. Weight Per Doz.: 42 lbs.	

KLEIN'S "XELA" ELECTRICIAN'S KNIFE

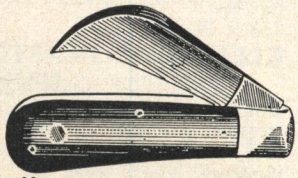
This knife is designed especially for the electrician and maintenance man. Has a sharp general utility blade and a screw driver blade which locks automatically in open position.
The blades are of high-grade cutlery steel carefully tempered. Fitted with wrought shackle riveted in handle.



Cat. No.	Length Closed
1550-4	4 in.

KLEIN'S "XELA" LINEMAN'S KNIFE

A sturdily constructed knife designed for long, hard service. Single 3-in. blade is of high-grade, carefully tempered cutlery steel. Blade locks automatically in open position. Hard wood handle is rounded and designed for firm, comfortable grip. Fitted with spring shackle.



Cat. No.	Length Closed
1550-4	4 in.

KLEIN'S "XELA" SKINNING KNIFE

A high-quality knife designed for skinning. Particularly used in the telephone field. Hard wood handle with ring for attaching to snap.

Cat. No.	Size
1550-5	3¼ in.

KLEIN'S PLASTIC HANDLE SKINNING KNIFE

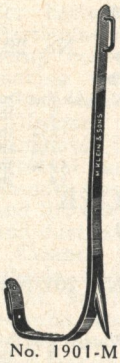
A high-quality skinning knife with plastic insulated handle. Handle is red and provides excellent insulation and comfortable grip. Back of blade ground flat for scraping. Handy ring in handle for fastening to snap.

Cat. No.	Length Overall	Blade
1570-3	8 in.	3 in.

KLEIN'S STD. CLIMBERS

No. 1901-M

Stock sizes in fixed length pattern: 15, 15½, 16, 16½, 17, 17½ and 18 inches, measured from intsep to end of shank. Adjustable pattern climbers are adjustable to 15, 15½, 16, 16½, 17, 17½ and 18 inches, measured from instep to top of slide. Special sizes in either fixed length or adjustable climbers made to order. Every climber individually tested. Gaffs 3½ inches long measured on the outside. Climbers aluminum finish.



No. 1901-M



No. 1901-M-ADJ

Cat. No.	Av. Weight Per Pair
1901-M Riveted Strap Loop	3⅜ lbs.
1901-M-ADJ Riveted Strap Loops	3¾ lbs.
C-1901-M-ADJ Complete with Straps and Pads	4¼ lbs.

Adjustable Climbers are available completely assembled with Straps and Pads and include No. 5301-9 Calf Straps. No. 5301-10 Ankle Straps and No. 8207 Climber Pads.

SAFETY BELT

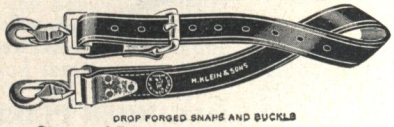


First quality and eslection harnes leather throughout. The cushion, 3½ inches wide, carries the Dee rings. The outer strap or tool loop is 1½ inches wide, formed into loops by riveting to the cushion. Passed through Dee rings. Dee rings and buckle are solid steel drop forgings of improved design, everyone tested to 1500 lbs. Galvanized finish. Surfaces taking the wear of the Dee rings arep rotected by copper safety liners riveted throuhg the full thickness of the belt. All rivets are solid copper, hand set with burrs. Sewing is with linen thread, hot waxed and lock stitched.
Furnished with plier pocket, knife snap, and tape thong.

Cat. No.	Av. Weight Per Doz.
5204-D.E.	With Standard "D" Rings. Width 3½ in. .38 lbs.

Klein's Leather Safety Strap—1¾" Wide

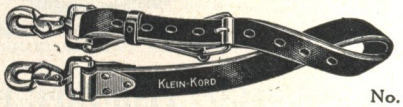
Drop Forged Tested Hardware



No. 5250

Cat. No.	Size and Description	Av. Weight Per Doz.
KL-5250	1¾ in. x 5 ft. 8 in. "Klein-Lok" Snaps. Stainless Clips	32½ lbs.
5250	1¾ in. x 5 ft. 8 in. Standard Snaps. Stainless Clips	32½ lbs.

Klein's "Klein-Kord" Safety Straps—Red Center

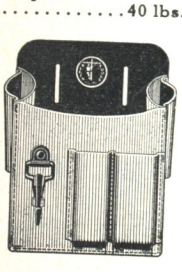


No. KL-5233

Cat. No.	Size and Description	Av. Weight Per Doz.
5233	1¾ in. x 5 ft. 8 in. Standard Snaps. Stainless Clips	36 lbs.
5233-7	1¾ in. x 7 ft. Standard Snaps. Stainless Clips	40 lbs.
KL-5233	1¾ in. x 5 ft. 8 in. "Klein-Lok" Snaps. Stainless Clips	36 lbs.
KL-5233-7	1¾ in. x 7 ft. "Klein-Lok" Snaps. Stainless Clips	40 lbs.

Klein's Combination Tool Pocket

A high-quality pocket specially designed for electricians and maintenance men. Has large utility pocket, two screw driver pockets, two plier pockets and a handy knife snap. Made of high-grade leather to give finest service. Size overall, 8½ in. high; width, 6½ in.



Cat. No. 5126

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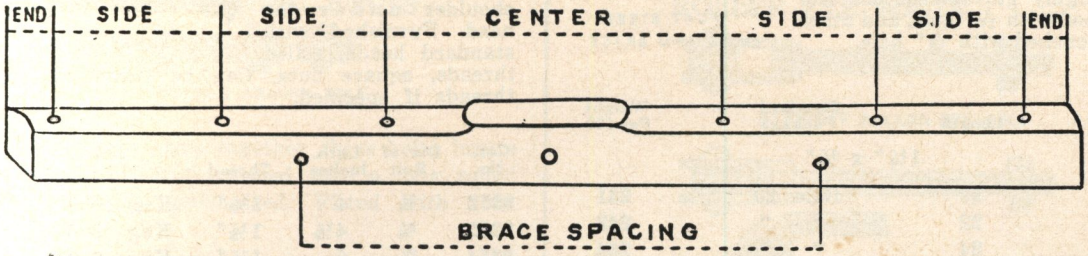
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STANDARD DOUGLAS FIR CROSSARMS



Douglas Fir, also known as Washington Fir or Yellow Fir, comes from the vast forestlands of the Pacific Northwest. For cross arm purposes, fir wood has no peer, best combining the prime requisites of strength and durability with light weight. Consequently, fir cross arms are the accepted standard and have been adopted almost universally, being in general use throughout the country for power and communications lines. Because of the heartwood characteristic of the wood, fir arms do not necessarily require preservative treatment for long life. However, dip or pressure treatment with either pentachlorophenol or creosote is available.

The following specifications are recognized generally as standard. Cross arms shall be fabricated in accordance with these specifications, unless specifically ordered otherwise. See instructions below for ordering special arms.

Material: Unless otherwise specified, in accordance with current specifications of the Edison Electric Institute. Complete EEI Specifications furnished upon request.

3¼x4¼ Electric Light Arms

Lgth. Arm	No. Pins	Pin Holes: Spacing, Inches: Center	Sides	Ends	Size Inches	Center Bolt Hole Inches	Brace Bolt Spacing	Use Lgth. Brace	Wt. Lb. per 100
3′	2	28	..	4	1 17/32	5/8	25	20	1062
4′	4	16	12	4	1 17/32	5/8	28	22	1416
5′	4	18	17	4	1 17/32	5/8	28	22	1770
6′	4	22	21	4	1 17/32	5/8	32	24,26	2124
6′	6	16	12	4	1 17/32	5/8	32	24,26	2124
8′	6	18	17½	4	1 17/32	5/8	32	24,26	2832
8′	8	16	12	4	1 17/32	5/8	32	24,26	2832
8′6″	10	16	9¾	4	1 17/32	5/8	32	24,26	3009
10′	8	17½	15¾	4	1 17/32	5/8	42	30,32	3540
10′	10	16	12	4	1 17/32	5/8	42	30,32	3540
10′	12	16	9⅝	3⅞	1 17/32	5/8	42	30,32	3540

3x4¼ R.S.A. Arms

6′	4	20	22	4	9/16	11/16	..	....	1980
8′	6	19	17¼	4	9/16	11/16	..	....	2640
10′	8	19	15½	4	9/16	11/16	..	....	3300
10′	10	16	12⅜	2½	9/16	11/16	..	....	3300

3x4¼ Western Union Arms

6′	6	20	11½	3	9/16	21/32	..	....	1980
8′	8	21	11½	3	9/16	21/32	..	....	2640
10′	10	22	11½	3	9/16	21/32	..	....	3300

2¾x3¾ Pony Telephone Arms

2′	2	17	....	3½	1 9/32	5/8	..	....	540
2′6″	2	23	....	3½	1 9/32	5/8	..	....	675
3′	2	29	....	3½	1 9/32	5/8	25	20	810
3′6″	4	16	9½	3½	1 9/32	5/8	28	22	945
5′2″	6	16	9¾	3½	1 9/32	5/8	28	22	1395
6′10″	8	16	9¾	3¾	1 9/32	5/8	28	22	1845
8′6″	10	16	9¾	4	1 9/32	5/8	28	22	2295
10′	12	16	9⅝	3⅞	1 9/32	5/8	28	22	2700

3½x4½ N.E.L.A. Arms

Lgth. Arm	No. Pins	Pin Holes: Spacing, Inches: Center	Sides	Ends	Size Inches	Center Bolt Hole Inches	Brace Bolt Spacing	Use Lgth. Brace	Wt. Lb. per 100
3′2″	2	30	....	4	1 17/32	11/16	28	22	1267
5′7″	4	30	14½	4	1 17/32	11/16	38	28	2233
8′	6	30	14½	4	1 17/32	11/16	38	28	3200
9′2″	8	30	12	4	1 17/32	11/16	38	28	3667

3¼x4¼ N.E.L.A. (Light) Arms

3′2″	2	30	....	4	1 17/32	11/16	28	22	1120
5′7″	4	30	14½	4	1 17/32	11/16	38	28	1976
8′	6	30	14½	4	1 17/32	11/16	38	28	2832
9′2″	8	30	12	4	1 17/32	11/16	38	28	3245

3¼x4¼ New England Arms

3′	2	30	....	3	1 17/32	11/16	33	26	1062
5′6″	4	30	13½	4½	1 17/32	11/16	36	28	1947
7′9″	6	30	13½	4½	1 17/32	11/16	36	28	2743
10′	8	30	13½	4½	1 17/32	11/16	36	28	3540

3¾x4¾ New England Power Arms

3′	2	30	....	3	1 17/32	11/16	33	24,26	1398
5′6″	4	30	13½	4½	1 17/32	11/16	36	28	2563
7′9″	6	30	13½	4½	1 17/32	11/16	36	28	3612
10′	8	30	13½	4½	1 17/32	11/16	36	28	4660

3¼x4¼ Pacific Arms

3′	2	28	..	4	1 17/32	5/8	32	24,26	1062
5′	4	28	12	4	1 17/32	5/8	32	24,26	1770
7′	6	28	12	4	1 17/32	5/8	32	24,26	2478
9′	8	28	12	4	1 17/32	5/8	42	30,32	3186
11′	10	28	12	4	1 17/32	5/8	42	30,32	3984

Standard cross arms as above are untreated, drilled with recommended tolerances for ⅝-inch center bolt and ⅜-inch brace bolts, horizontal drilling, no double-arming holes, and roofed to a 45⅝-inch radius. Arms shall be of the net dimensions called for subject to unavoidable slight natural shrinkage and allowable variations. Workmanship shall be of the highest standards, pin and bolt holes shall be accurately spaced and smoothly drilled to show a minimum of splintering where bits break through.

Order for special cross arms should be accompanied by blueprint or sketch whenever possible, or should state: (a) size in width, height and length; (b) number of pin holes: (c) spacings between pin holes—center, sides, ends; (d) size of pin holes (or state size of pin to be used); (c) size of center bolt hole (or state size of bolt to be used, otherwise drilling shall be for ⅝-inch bolt); (f) size of brace bolt holes (or state size of bolts to be used, otherwise drilling shall be for ⅜-inch bolts); (g) spacing between brace bolt holes (drilling shall be horizontal unless vertical is specified.)

Thus, the standard 8-foot 6-pin cross arm is described: 3½x4½ inches by 8-foot six pin holes spaced 30-inch center, 14½-inch sides; 4-inch ends, drilled for 1½-inch pins; center bolt hole for ⅝-inch bolt; brace bolt holes, for ⅜-inch bolts, spaced 38 inches apart.

SPECIAL NOTE—If arms wanted are to have double-arming holes: or are to be painted, creosoted, or preservatively treated in any way; or are to be unroofed or beveled edge or roofed in any manner other than 45⅝-inch radius: or if quality is to be other than standard; or if any special feature is to be incorporated, such information fully detailed must be included in the specifications. Arms made special are of no value for general stock and may not be cancelled or returned.

Pressure Treated Southern Yellow Pine Cross Arms
Specifications and Quotations Furnished Upon Request.

FLAT CROSS ARM BRACE

Made of open hearth steel, thoroughly galvanized; one end punched with 7/16" hole, and other end punched with 9/16" hole.


FLAT STEEL CROSS ARM BRACE

Cat. No.	Length	Standard Package	Weight Per 100
	1¼" x ¼"		
9215	20	Bdle. 20	231
9216	22	" "	248
9217	24	" "	264
9218	26	" "	297

ANGLE CROSS ARM BRACES


STEEL CROSS ARM BRACE

Made of angle iron thoroughly galvanized. Each end punched with 9/16" hole, center hole punched 11/16".

Cat. No.	Size of Angle	Hole Centers	Drop Height	Std. Pkg.	Weight Per 100
9251	1½x1½x3/16	42	12	" "	795
9252	1½x1½x3/16	48	14	" "	882
9255	1½x1½x3/16	48	18	" "	976
9256	1½x1½x3/16	60	18	" "	1103
9260	1¾x1¾x3/16	60	18	" "	1300
9266	1¾x1¾x3/16	72	22	" "	1546

LAG SCREWS


GIMLET POINT LAG SCREW


FETTER DRIVE LAG SCREW

These lag screws are hot dipped galvanized and are available in various sizes as listed below. Gimlet point screws will be furnished for 5/16". Fetter drive screw for 3/8" and ½".

Cat. No.	Length in Inches	Std. Pkg.	Approx. Ship. Wt. Per 100
	5/16 INCH		
9679	3	Keg 2500	6.8
9680	3½	Keg 2000	8.8
	3/8 INCH		
9535	3	Keg 2000	10.0
9536	3½	Keg 1500	11.6
9537	4	Keg 1500	13.3
9538	4½	Keg 1250	14.9
	½ INCH		
9542	3	Keg 1100	19.0
9543	3½	Keg 1000	21.3
9544	4	Keg 800	23.6
9545	4½	Keg 700	25.3

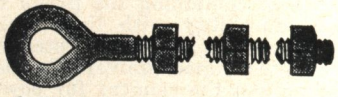
CARRIAGE BOLTS

Thoroughly galvanized with long square shoulder under the head. Furnished with standard heads, rolled threads, square nuts. Can be furnished with cut threads if specified.


CARRIAGE BOLT

Cat. No.	Dia. of Bolt	Lgth. Inches	Thread	Std. Pkg.	Approx. Shpg. Wt. Per 100
9352	3/8	4	1½"	Keg 1000	15.9
9353	3/8	4½	1½"	Keg 900	17.2
9354	3/8	5	1½"	Keg 800	18.5

DOUBLE ARMING EYE BOLTS


DOUBLE ARMING EYE BOLT

With forged oval eye and three square nuts. Bolts and nuts thoroughly galvanized. The length of bolts listed below is measured from under the eye, conforming to E.E.I. specifications.

Cat. No.	Dimensions in Inches: Dia. of Bolt	Length *	Thread Length	Std. Pkg.	Approx. Ship. Wt. Per 100
9405-N	5/8	16	12	Box 50	214
9406-N	5/8	18	14	Box 50	226
9407-N	5/8	20	16	Box 50	244
9408-N	5/8	22	18	Box 50	262
9409-N	5/8	24	20	Box 50	285
9415-N	3/4	20	16	Box 25	350
9416-N	3/4	22	18	Box 25	385
9417-N	3/4	24	20	Box 25	425

* Measured from under the eye to conform with E.E.I. specifications.

MACHINE BOLTS


MACHINE BOLT

Furnished with rolled threads and square nut, thoroughly galvanized.

Cat. No.	Dia. of Bolt	Length Inches	Length Thread Inches	Std. Pkg.	Approx. Ship. Wt. Per 100
9310	½	4½	1½	Keg 550	33.3
9311	½	5	1½	Keg 500	35.5
9312	½	6	1½	Keg 400	40
9313	½	7	1½	Keg 400	45
9314	½	8	4	Keg 350	49
9315	½	10	4	Box 150	60
9316	½	12	6	Box 150	69
9325	5/8	8	4	Box 100	82
9326	5/8	10	6	Box 100	98
9327	5/8	12	6	Box 100	112
9328	5/8	14	6	Box 100	129
9329	5/8	16	6	Box 50	143
9330	5/8	18	6	Box 50	158
9331	5/8	20	6	Box 50	172
9332	5/8	22	6	Box 50	187
9333	5/8	24	6	Box 50	201
9340	3/4	8	4	Box 50	136
9341	3/4	10	6	Box 50	157
9342	3/4	12	6	Box 50	180
9343	3/4	14	6	Box 50	202
9345	3/4	16	6	Box 50	223
9346	3/4	18	6	Box 50	244
9347	3/4	20	6	Box 50	272
9347½	3/4	22	6	Box 25	293
9348	3/4	24	6	Box 25	314

DOUBLE ARMING BOLTS



DOUBLE ARMING BOLT

For tying cross arms together these bolts insure a rigid construction. Furnished with a long rolled thread, thoroughly galvanized. Fitted with four square nuts.

Cat. No.	Dimension in Inches Dia. of Bolt	Overall Length	Thread	Std. Pkg.	Approx. Shpg. Wt. Per 100
9370	½	12	6	Box 100	101
9371	½	14	6	" 100	109
9372	½	16	8	" 100	117
9373	½	18	8	" 100	125
9374	½	20	8	" 100	133
9375	½	22	8	" 50	148
9376	½	24	8	" 50	156
9380	⅝	12	6	" 50	150
9381	⅝	14	6	" 50	176
9382	⅝	16	6	" 50	182
9383	⅝	18	8	" 50	198
9384	⅝	20	8	" 50	214
9385	⅝	22	8	" 50	230
9386	⅝	24	8	" 50	246
9390	¾	12	5	" 50	234
9391	¾	14	6	" 50	254
9392	¾	16	8	" 50	274
9393	¾	18	8	" 25	318
9394	¾	20	8	" 25	338
9395	¾	22	8	" 25	348
9396	¾	24	8	" 25	388

EYE BOLTS



EYE BOLT

Furnished with forged oval eye, rolled threads, and square nut, thoroughly galvanized. The length for bolts listed below is measured from under the eye, conforming to E.E.I. specifications. The ½" bolts are furnished with ¾" x 1" opening in forged eye, the ⅝" and ¾" bolts are furnished with 1½" x 2" opening.

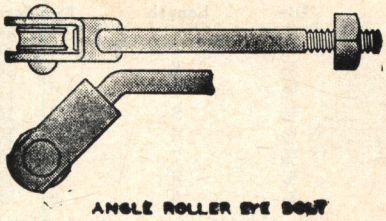
Cat. No.	Dia. of Bolt	Length *	Thread Length	Std. Pkg.	Approx. Ship. Wt. Per 100
9430-N	⅝	6	4	Box 100	116
9431-N	⅝	8	6	Box 100	133
9432-N	⅝	10	6	Box 50	148
9433-N	⅝	12	6	Box 50	162
9434-N	⅝	14	6	Box 50	178
9435-N	⅝	16	6	Box 50	190
9436-N	⅝	18	6	Box 50	208
9437-N	⅝	20	6	Box 50	222
9437½-N	⅝	22	6	Box 50	237
9438-N	⅝	24	6	Box 50	252

* Measured from under the eye, conforming to E.E.I. specifications.

ROLLER EYE BOLTS



STRAIGHT ROLLER EYE BOLT



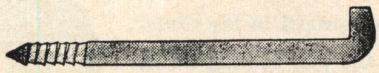
ANGLE ROLLER EYE BOLT

For use in guying a pole without the use of a thimble. The use of a roller at the point of a cable bend eliminates crimping and injury to the strand when installing the guy. Eliminates the use of guy hooks, strain plates and the necessity of wrapping the guy wire around the pole. Furnished in straight and angle types, thoroughly galvanized. Square nut at end.

Catalog Number Straight Type	Angle Type	Dia. of Bolt	Lgth. of Bolt	Weight Lbs. Per 100	Lgth. of Thread
A-205200-1	A-205202-1	⅝	8	4	120
A-205200-2	A-205202-2	⅝	10	4	140
A-205200-3	A-205202-3	⅝	12	6	160
A-205200-4	A-205202-4	⅝	14	6	180
A-205200-5	A-205202-5	⅝	15	6	190
A-205200-6	A-205202-6	⅝	16	6	200
A-205200-7	A-205202-7	⅝	18	6	220
A-205201-1	A-205203-1	¾	10	4	210
A-205201-2	A-205203-2	¾	12	6	240
A-205201-3	A-205203-3	¾	14	6	280
A-205201-4	A-205203-4	¾	15	6	300
A-205201-5	A-205203-5	¾	16	6	320
A-205201-6	A-205203-6	¾	18	6	360

Standard package consists of Box of 50.

HOOK HEAD POLE STEPS

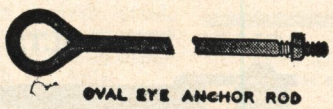


STD. HOOK HEAD POLE STEP

Made of open hearth steel, thoroughly galvanized. Furnished with fetter drive threads. The 9643 design has a long hook head which prevents lineman's foot from slipping off while standing at work.

Cat. No.	Dimensions in Inches Diam.	Length	Std. Pkg.	Weight Lbs Per 100
9640	⅝	9	Keg 300	73
9641	⅝	9	Keg 250	84
9642	⅝	10	Keg 250	95
9643	⅝	10	Keg 175	115

OVAL EYE ANCHOR ROD

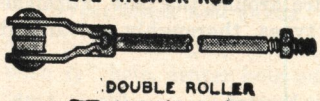

OVAL EYE ANCHOR ROD

Furnished thoroughly galvanized with either cut or rolled thread and one square nut.

Cat. No.	Dia. Inches	Length Feet	Standard Package	Weight, Lbs. Per 100
9475	⅝	5	Bdle. 10	540
9476	⅝	6	" 10	650
9477	⅝	7	" 10	750
9478	⅝	8	" 10	850
9480	¾	6	" 10	920
9481	¾	7	" 5	1060
9482	¾	8	" 5	1240
9483	¾	9	" 5	1460

ROLLER EYE ANCHOR RODS


SINGLE ROLLER EYE ANCHOR ROD

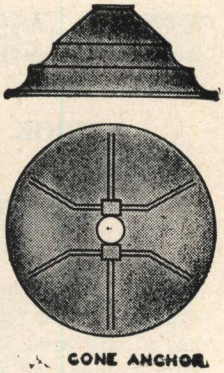

DOUBLE ROLLER EYE ANCHOR ROD

Furnished with single roller, double roller or equalizer roller. The use of a roller at cable end eliminates crimping and injury to strand.

Cat. No.	Type	Dia. in Inches	Length Feet	Std. Pkg.	Wght., Lbs. Per 100
A-340000-1	Single	⅝	6	Bdle. 10	680
A-340000-2	Single	⅝	7	" 10	755
A-340000-3	Single	⅝	8	" 10	830
A-340000-4	Single	¾	6	" 5	960
A-340000-5	Single	¾	7	" 5	1120
A-340000-6	Single	¾	8	" 5	1245
A-340000-7	Single	¾	9	" 5	1350
A-340001-1	Double	¾	6	" 5	970
A-340001-2	Double	¾	7	" 5	1130
A-340001-3	Double	¾	8	" 5	1255
A-340001-4	Double	¾	9	" 5	1460

CONE ANCHOR

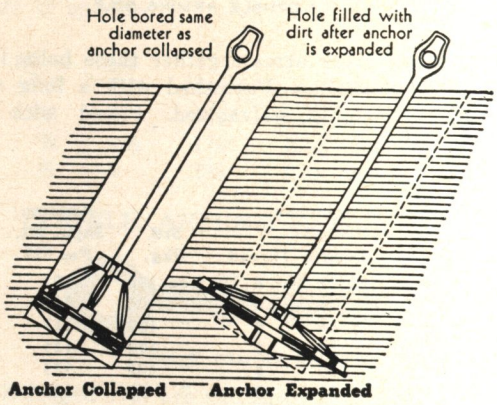
Made of cast iron conical shape to insure the desired holding qualities. Conical point when anchor is installed projects upward in the direction of the pull serving as an inverted wedge. Anchors are furnished with black asphaltum paint.

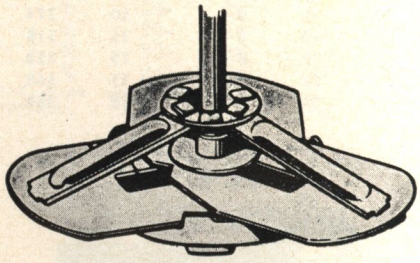

CONE ANCHOR

Cat. No.	Dia.	Hght.	Hole	Guy Rod Size	Wght., Lbs. Per 100
A-200106-1	6	2½	¾	⅝ & Smaller	350
B-200107-1	8	3½	⅞	¾ & Smaller	550
B-200108-1	10	4⅛	⅞	¾ & Smaller	950
B-200117-1	12	5⅝	1⅛	1 & Smaller	1750
B-200118-1	16	7½	1⅛	1 & Smaller	2800

EXPANDING ANCHORS

Recommended for use in earth formations that will permit the anchor to expand without injury to the plates. These anchors are not recommended for use in extremely rocky soil, because of the excess tamping necessary to expand.





Expanding Anchor (Steel)

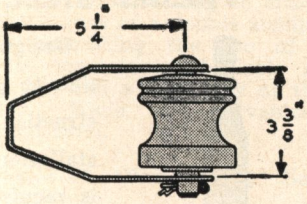
Catalog Number	Type	Size of Anchor and Hole	Expanded Area—Square Inches	Holding Power—Pounds
200015E6	2-Way	8"	94	6000
200015E8	3-Way	8"	115	8000
200015E10	4-Way	8"	135	10000
200029B1	4-Way	10"	200	20000

Will accommodate ⅝" and ¾" Diameter Rods.

PRICES ON APPLICATION

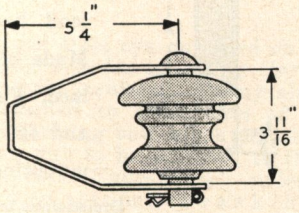
DEAD ENDS

This dead end consists of a galvanized "U" with No. 680 insulator held by a galvanized pin and brass self-locking cotter pin.



No. 1759—Secondary Dead End.
Weight per 100 — 230

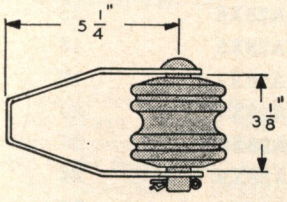
This is a primary dead end for use on 2300 volt circuits. No. 697 wet process insulator is held by a galvanized pin and self-locking brass cotter pin.



No. 1779—Primary Dead End.
Weight per 100 — 380

CAT. NO. 1779 G

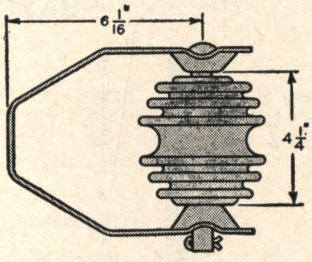
The No. 681 wet process insulator is held in the galvanized steel strap by clevis pin and self-locking brass cotter pin.



No. 1759-GM—Secondary Dead End.
Weight per 100 — 258

CAT. NO. 1759 GM

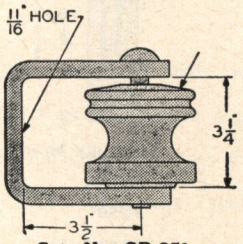
A large size cupped clevis dead end with a heavy solid galvanized U strap and a large wet process porcelain insulator. A hardened steel clevis pin and a brass self-locking cotter pin hold the insulator in place.



No. 1975—Cupped Clevis Dead End
Weight per 100 — 540

Cat. No. 680 Insulator

Dead end with 1" heavy gauge channel steel clevis. Available with No. 680 dry process insulator or No. 684 wet process insulator.



Cat. No. GP-251

Catalog Number	Description	Approx. Wt. Lbs. Per 100
GP-251	With No. 680 Insulator	252
GP-251-S	With No. 684 Insulator	390

SPOOL INSULATORS

A medium sized plain spool insulator made of dry and wet process porcelain with 5/16" hole.

Cat. No.	Material	Approx. Ship. Wt. Per 100
670	Dry process	46
674	Wet process	46
*675	Dry process	46

*White Finish

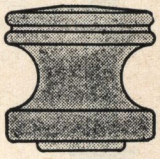


CAT. NO. 670

A larger insulator with an extra bead on upper flange and flat sloping top. Made of dry and wet process porcelain with 3/4" hole.

Cat. No.	Material	Approx. Ship. Wt. Per 100
680	Dry process	118
684	Wet process	118
*685	Dry process	118

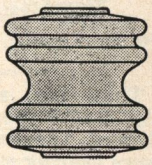
*White Finish



CAT. NO. 680

A large spool insulator with double bend at top and bottom. Made of wet process porcelain with 11/16" hole.

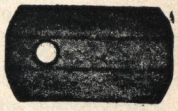
Cat. No.	Finish	Approx. Ship. Wt. Per 100
681	Brown	120
686	White	120



CAT. NO. 681

STRAIN INSULATORS

Wet process brown glazed. Put to a severe flashover forge test to eliminate break down in service. Packed in wooden wire bound boxes and corrugated paper partitions.



STRAIN INSULATOR

Cat. No.	Hole	Dimension in Inches Over-all	Dimension in Inches Over Groove	Ultimate Strength Pounds	Price Per 100
NG1A1	3/8	2 1/4	1 1/2	4000	$18.39
NG2A1	5/8	3 1/2	2 1/2	10000	27.58
NG3A1	7/8	4 1/4	2 7/8	12000	36.78
NG4A1	1	5 1/2	3 3/8	20000	

WOOD COB PINS

Wood top pins made of seasoned locust thoroughly impregnated with paraffine and threaded to fit a standard 1" insulator hole. The 1/2" bolt is heavily galvanized and has two fins near the top which prevent the cob from turning on the bolt.

Cat. No.	Dimensions in Inches Height Above Arm	Lgth. of Shank	Dia. of Base	Std. Pkg.	Approx. Wt. Lbs. Per 100
243217	4 1/4	1 1/2	1 3/4	Bbl. 300	55
243237	4 1/4	5	1 3/4	Bbl. 275	71
243742	4 3/4	5	1 3/4	Bbl. 200	79
243762	5 1/4	5	2	Bbl. 150	93
244232	5 1/4	4	2	.....	98
244252	5 1/4	6	2	Bbl. 125	103



Wood Cob Pin

FORGED STEEL PINS



Forged Steel Pin For Wood Arm



Forged Steel Pin For Steel Arm



TRANSFORMER SCREW PIN

These pins are made in popular sizes extending 4¾" and 6" above the crossarm with various length shanks. The bases are exceptionally large giving a large bearing surface on the arm. The wood crossarm pins are furnished with a round washer, 1 square nut and Palnut. Pins for metal crossarms are furnished with square nut and Palnut only.

The lead heads are cast directly around the end of the pin acting as a cushion and distributing the strain equally over the threads of the insulator regardless of irregularities. A special process bonds the head making it an integral part of the pin, impossible to turn or pull off.

Transformer pins of a lighter type are handy for a variety of services. Generally used for training primary wires, running light leads down the pole and the like. Its greatest application is for transformer work where the strains are not too great.

FOR WOOD CROSS ARMS

Catalog Number	Dimensions in Inches: Dia. of Head	Height Above Arm	Dia. of Base	Dia. of Shank	Length of Shank	Approx. Ship. Wt. Per 100
223843	1	4¾	2	⅝	5	206
223848	1	4¾	2	⅝	5½	206
225338	1	6	2	⅝	5	214
225348	1	6	2	⅝	5½	214
225459	1	6	2	¾	6½	304
235338	1⅜	6	2	⅝	5	242
235348	1⅜	6	2	⅝	5½	255
235459	1⅜	6	2	¾	6	337

FOR METAL CROSS ARMS

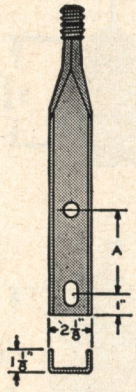
310042B3	1	5	1¾	½	1¼	105
223818	1	4¾	2	⅝	1½	126
310041B6	1	5	2	⅝	1½	126
310041B7	1	6	2	⅝	1½	135
310043B1	1	6	1¾	¾	2½	181
235318	1⅜	6	2	⅝	1½	168
235419	1⅜	6	2	¾	1½	214

[a] This pin differs from the No. 223848 only in the design of the body.

TRANSFORMER PINS

2305	1	6	2⅛	No. 22	2	99
2321	1	5	2¼	⅛	2⅛	115
2311	1	4¾	1¾	No. 22	2⅛	99

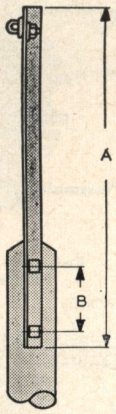
PRESSED STEEL POLE TOP PINS



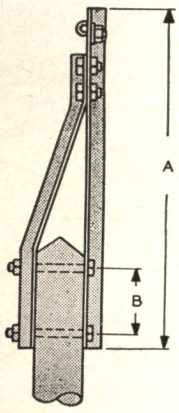
Designed with conical top section to give a more rigid construction. Recommended for installations where added strength is required to resist heavy line strains. Furnished with 1" Allen lead heads and straight base. Made of 9 gauge steel, galvanized. Furnished with $\frac{11}{16}$" hole and $\frac{11}{16}$" x 1¼" slot to facilitate mounting.

Catalog Number	Dimensions in Inches: Overall Length	A	Approx. Ship. Wt. Per 100
SA28X2	15	4	280
SA28X8	15	5	...
SA28X3	16	5	294
SA28X1	18	5	328
SA28X4	20	5	360
SA28X5	20	8	360
SA28X9	24	5	...
SA28X6	24	8	425
SA28X7	30	8	522

BAYONETS



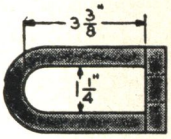
CAT. NO. 9940



CAT NO. 9950-A

Cat. No.	Angle
9940	2 x2 x¼x36"
9941	2½x2½x¼x48"
9942	2½x2½x¼x66"
9943	3 x3 x¼x84"
9950-A	2 x2 x$\frac{5}{16}$x36"
9951-A	2 x2 x$\frac{5}{16}$x48"
9952-A	2 x2 x¼x66"
9953-A	2½x2½x¼x84"

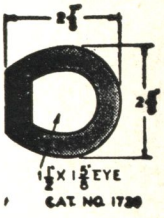
DEAD END FITTINGS



Clevis for attaching to either or both ends of a double arming bolt permitting the use of a strain insulator and clevis at one end and a back guy at the other. Made of galvanized forged steel.

No. 1741—Clevis for 5/8" Bolt

Weight per 100 — 114



Forged steel eye nut used on a machine bolt for attaching clevis and strain insulator. It may also be attached to either end of a double arming bolt which permits a back guy to be attached to the same bolt. Tapped 5/8" unless otherwise specified. Breaking strength 24,000 pounds.

No. 1739—Eye Nut

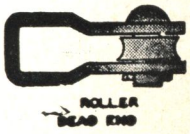
Weight per 100—61



A malleable iron hook for use on a bolt where an eye nut or bolt clevis is used is not feasible. Threaded to fit from a 3/8" to 3/4" bolt as specified. Breaking strength 7000 lbs. Galvanized.

No. 1745—Bolt Hook

Weight per 100—110

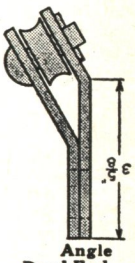


Wide spread roller dead end with a slotted hole in the base to take 5/8", 3/4" or 1" bolt head. Thoroughly galvanized.

No. A-260003-1 for 5/8" bolt

No. A-260003-2 for 3/4" bolt

No. A-260003-3 for 1" bolt



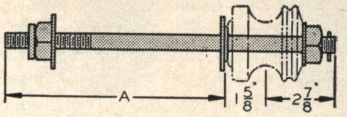
Angle Dead End

Angle roller dead end with two straps welded together and a slotted hole punched through them for attachment. The roller runs freely on a 1/2" pin. Galvanized.

Catalog Number	Description	Approx. Wt. lbs. Per 100
A-260001-1	Angle Dead End for 5/8" Bolt	170
A-260001-2	Angle Dead End for 3/4" Bolt	170
A-260001-3	Angle Dead End for 1" Bolt	170

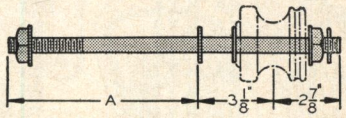
RURAL LINE MATERIAL

Listed below are but a few of a complete line of low cost construction items applicable to rural systems. Your every rural line requirement can be filled. Write for complete information.



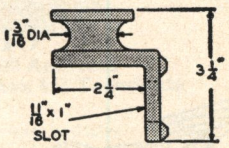
SINGLE SPOOL BRACKET

CAT. NO.	A
1401	9"
1402	10"
1403	11"
1404	12"

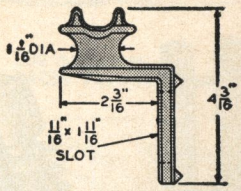


EXTENSION BRACKET

CATALOG NUMBER			
WITHOUT INSULATOR	WITH 680 DRY INSUL	WITH 684 WET INSUL	A
GP-207	GP-207-1	GP-207-2	6
GP-208	GP-208-1	GP-208-2	6 1/2
GP-209	GP-209-1	GP-209-2	7
GP-210	GP-210-1	GP-210-2	7 1/2
GP-211	GP-211-1	GP-211-2	8



Neutral Wire Bracket Cat. No. GRL-31

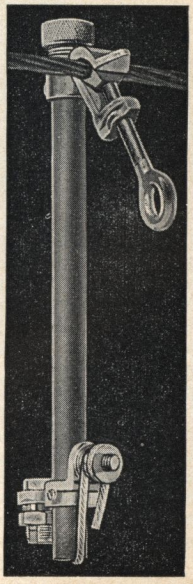


Neutral Wire Bracket Cat. No. RL-51

SUSPENSION FUSE CUTOUTS

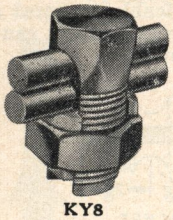
Designed primarily for rural line service to be suspended from 3/4" or smaller conductor. Furnished with bakelined cartridge having an outer Bakelite® casing and a heat-resisting fibre lining. Upper contact is of hot line clamp design. Lower contact consists of a knurled nut for contact with the fuse link, and a No. 2 split bolt connector for connection to the transformer. Furnished with fuse link throwout device which withdraws the unburned portion of the link. Approximate overall length 11½". Rated at 15,000 volts, 50 amperes.

No. B-232028-3 Cadmium Plated Suspension Fuse Cutout

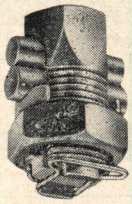


SPLIT BOLT SOLDERLESS CONNECTOR

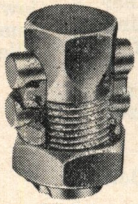
Copper to Copper



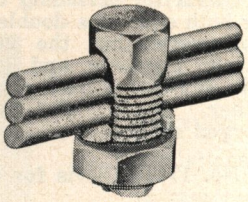
KY8



KY6R



KY4B



KY6L



KY6SE

BRONZE SPLIT BOLT

WIRE SIZE Solid	Stranded	Type "A" Copper-weld	Catalog Number	Std. Pkg.	Approx. Net Wt. Lbs. Per Hundred
8	8		KY8	200	3
6		8A	KY6	100	6¾
4	5	6A	KY4	100	8¾
2	3	4A	KY2	50	12¾
1	2		KY1	50	15
2/0	1/0	2A	KY10	25	21½
3/0	2/0		KY20	25	34¼
4/0	4/0		KY40	12	62½
	350MCM		KY350	5	75
	500MCM		KY500	5	100
	750MCM		KY750	2	150
	1000MCM		KY1000	2	200

SPLIT BOLT WITH NUT RETAINER

8	8				
6		8A	KY6R	100	6¾
4	5	6A	KY4R	100	8¾
2	3	4A	KY2R	50	12¾
1	2		KY1R	50	15
2/0	1/0	2A	KY10R	25	21½
3/0	2/0		KY20R	25	34¼
4/0	4/0		KY40R	12	62½

SPLIT BOLT WITH SPACER BLOCK

Solid	Stranded	Type "A" Copper-weld	Catalog Number	Std. Pkg.	Approx. Net Wt. Lbs. Per Hundred
8	8				
6		8A			
4	5	6A	KY4B	50	9¾
2	3	4A	KY2B	50	14¼
1	2		KY1B	50	17
2/0	1/0	2A	KY10B	25	23
3/0	2/0		KY20B	25	38¼
4/0	4/0		KY40B	12	69½
	350MCM		KY350B	5	75
	500MCM		KY500B	5	100
	750MCM		KY750B	2	150
	1000MCM		KY1000B	2	200

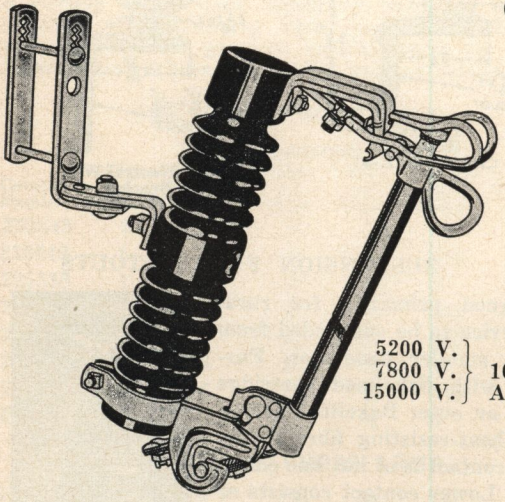
BRONZE SPLIT BOLT 3 WIRE

8	8				
6		8A	KY6L	100	7¼
4	5	6A	KY4L	100	9½
2	3	4A	KY2L	50	13¼

SERVICE ENTRANCE

8	8				
6		8A	KY6SE	100	2½
4	5	6A	KY4SE	100	4

OPEN TYPE DROP-OUT FUSE CUTOUTS



This Open Type Drop-Out Fuse Cutout incorporates a variety of interchangeable cartridges and mountings in three voltage ratings to meet major operating requirements. Interrupting capacities up to 10,000 amperes are available. Mountings with larger insulators are available to adapt the cutout for usages requiring over-insulation, such as seacoast areas and steel substations.

By combining cutouts for various operating requirements in an inter-related family, complete operating and stocking versatility is available to the user. As fault conditions change or a load break cutout becomes necessary, simply change the cartridge. These same cartridges can be used at substations and at other locations.

The latest in operating requirements, engineering thinking, and manufacturing technique have been combined to put features into the HDO that make it the best cutout available.

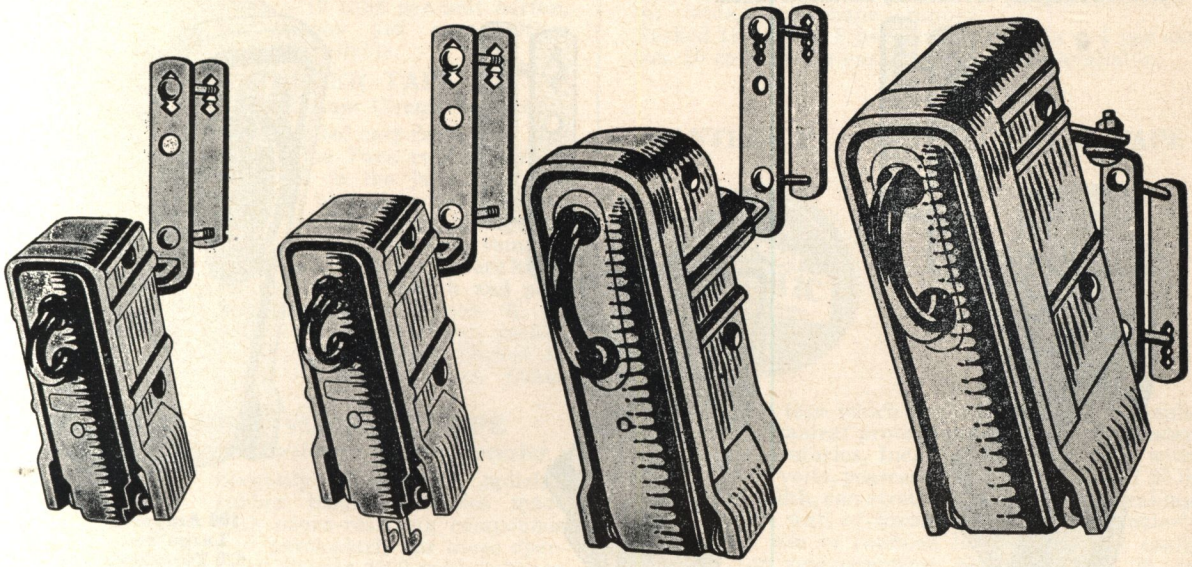
CATALOG NUMBERS

Int. Cap Amps.	Single Insulator Comp. Ass'y	Single Insulator Cartridge	Two Insulator Comp. Ass'y	Two Insulator Cartridge	BIL Insulator Comp. Ass'y	BIL Insulator Cartridge	Remarks
5200 Volts							
3000	FO1A1	FO1A51	.....	.....	.....	.....	
5000	FO1A2	FO1A52	.....	.....	.....	.....	
6000	FO1A3	FO1A53	.....	.....	.....	.....	
10000	FO1A8	FO1A58	.....	.....	.....	.....	Expendable Cap
3000	FO1A4	FO1A54	.....	.....	.....	.....	Expendable Cap
5000	FO1A5	FO1A55	.....	.....	.....	.....	Load Break
6000	FO1A6	FO1A56	.....	.....	.....	.....	Load Break
10000	FO1A9	FO1A59	.....	.....	.....	.....	Load Break
.....	FO1A7	FO1A57	.....	.....	.....	.....	Load Break
							200 amp. switch
7800 Volts							
3000	FO1B1	FO1B51	FD1B1	FO1B51	FD2B1	FO1B51	
5000	FO1B2	FO1B52	FD1B2	FO1B52	FD2B2	FO1B52	
6000	FO1B3	FO1B53	FD1B3	FO1B53	FD2B3	FO1B53	Expendable Cap
10000	FO1B8	FO1B58	FD1B8	FO1B58	FD2B8	FO1B58	Expendable Cap
3000	FO1B4	FO1B54	FD1B4	FO1B54	FD2B4	FO1B54	Load Break
5000	FO1B5	FO1B55	FD1B5	FO1B55	FD2B5	FO1B55	Load Break
6000	FO1B6	FO1B56	FD1B6	FO1B56	FD2B6	FO1B56	Load Break
10000	FO1B9	FO1B59	FD1B9	FO1B59	FD2B9	FO1B59	Load Break
.....	FO1B7	FO1B57	FD1B7	FO1B57	FD2B7	FO1B57	200 amp. switch
15000 Volts							
2000	FO1C1	FO1C51	FD1C1	FO1C51	FD2C1	FO1C51	
4000	FO1C2	FO1C52	FD1C2	FO1C52	FD2C2	FO1C52	
4000	FO1C3	FO1C53	FD1C3	FO1C53	FD2C3	FO1C53	Expendable Cap
8000	FO1C8	FO1C58	FD1C8	FO1C58	FD2C8	FO1C58	Expendable Cap
3000	FO1C4	FO1C54	FD1C4	FO1C54	FD2C4	FO1C54	Load Break
4000	FO1C5	FO1C55	FD1C5	FO1C55	FD2C5	FO1C55	Load Break
4000	FO1C6	FO1C56	FD1C6	FO1C56	FD2C6	FO1C56	Load Break
8000	FO1C9	FO1C59	FD1C9	FO1C59	FD2C9	FO1C59	Load Break
....	FO1C7	FO1C57	FD1C7	FO1C57	FD2C7	FO1C57	200 amp. switch

5200 VOLT PRIMARY FUSE CUTOUTS

5200 V primary fuse cutouts, in ratings of 50, 100 and 200 amperes, are available with interchangeable standard and heavy duty doors offering great advantage in economy of stocking, warehousing and installation.

These cutouts provide extra high interrupting capacity as is necessary without the extra cost for needless high continuous current rating. They can be installed with standard duty non-indicating or indicating doors. As feeder load requirements change and fault currents increase, standard duty doors can be easily replaced with heavy duty doors by the use of only a hook stick. In addition they can also be changed over to a stationary or indicating disconnect switch.

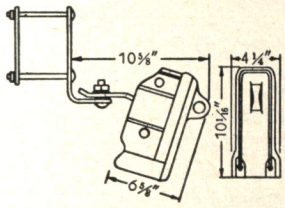


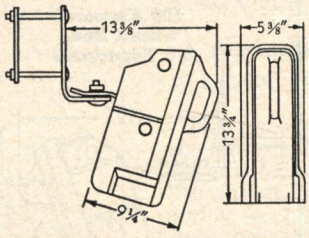
50 Amperes
No. 2 Stranded Terminals

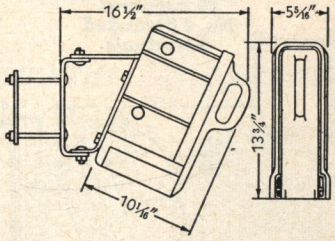
100 Amperes
Small Box 2/0 Terminals

100 Amperes
Large Box 4/0 Terminals

200 Amperes
500 MCM Terminals







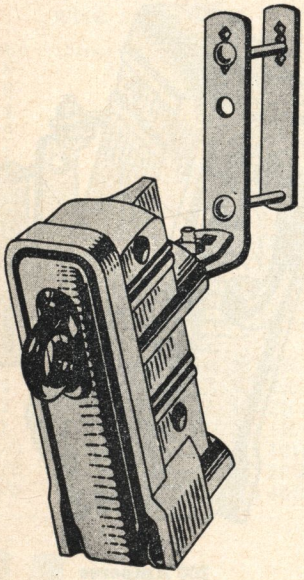
5200 VOLT PRIMARY FUSE CUTOUTS

Rating	Doors Available	Interrupting Capacity RMS Amperes 2.5 KV	Interrupting Capacity RMS Amperes 5 KV	ORDERING INFORMATION Complete Assembly	ORDERING INFORMATION PARTS Porcelain Box with Contacts Terminals and Hinges	ORDERING INFORMATION PARTS Door Complete with Fuse Cartridge or Switch Blade
50 Amperes	1. Standard duty, non-indicating Type PND	1,200 amp.	1,200 amp.	FE1A2	FE1A50	FE1A52
	2. Standard duty, indicating Type PVD (R)	1,200 amp.	1,200 amp.	FE1A1	FE1A50	FE1A51
	3. Heavy duty, indicating Type PHD	†8,000 amp.	*5,000 amp.	FE1A4	FE1A50	FE1A54
	4. Disconnect switch, non-indicating 100 amp.	.....	.....	FE1A8	FE1A50	FE1A58
	5. Disconnect switch, indicating 100 amp.	.....	.....	FE1A7	FE1A50	FE1A57
100 Amperes Small Box 2/0 Terminals	1. Standard duty, non-indicating Type PND	5,000 amp.	3,000 amp.	FEA1C2	FEA1C50	FEA1C52
	2. Standard duty drop-out, indicating, Type PVD	5,000 amp.	3,000 amp.	FEA1C1	FEA1C50	FEA1C51
	3. Intermediate duty indicating, Type P1D	†8,000 amp.	*5,000 amp.	FEA1C4	FEA1C50	FEA1C54
	4. Disconnect switch non-indicating, 200 amp.	.....	.....	FEA1C8	FEA1C50	FEA1C58
	5. Disconnect switch indicating, 200 amp.	.....	.....	FEA1C7	FEA1C50	FEA1C57
100 Amperes Large Box 4/0 Terminals	1. Standard duty, non-indicating Type PND	5,000 amp.	3,000 amp.	FE1C2	FE1C50	FE1C52
	2. Standard duty, indicating Type PVD	5,000 amp.	3,000 amp.	FE1C1	FE1C50	FE1C51
	3. Heavy duty, non-disconnecting Type PHD	†14,000 amp.	*10,000 amp.	FE1C6	FE1C50	FE1C56
	4. Disconnect switch non-indicating, 200 amp.	.....	.....	FE1C8	FE1C50	FE1C58
	5. Disconnect switch indicating, 200 amp.	.....	.....	FE1C7	FE1C50	FE1C57
200 Amperes	1. Heavy duty, indicating angle mounting, Type PHD	†20,000 amp.	*15,000 amp.	FE1E6	FE1E50	FE1E56
	2. Disconnect switch, indicating, angle mounting, 400 amp.	.....	.....	FE1E7	FE1E50	FE1E57

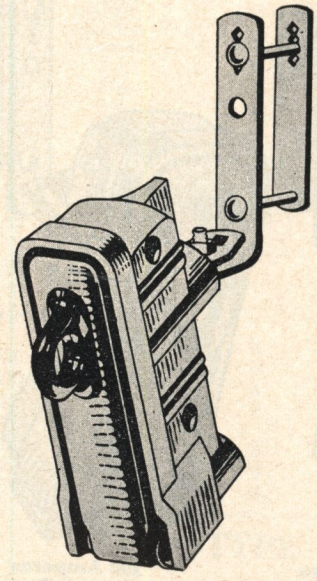
*Also 4800 Volts Line to Neutral Gr. Y System.
†Also 2400 Volts and 2500 Volts Line to Neutral Gr. Y System.

7800 VOLT PRIMARY FUSE CUTOUTS

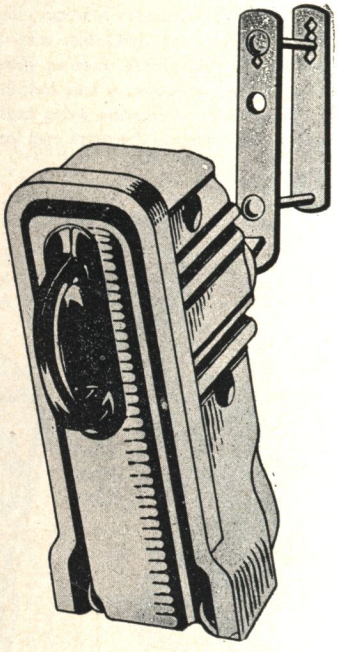
7800 V primary fuse cutouts in ratings of 50 and 100 amperes are available with interchangeable standard duty doors. They provide extra high interrupting capacity as is necessary without the extra cost for high continuous current rating and can be installed with standard duty non-indicating or indicating doors. These units can also be changed over to a stationary or indicating disconnect switch.



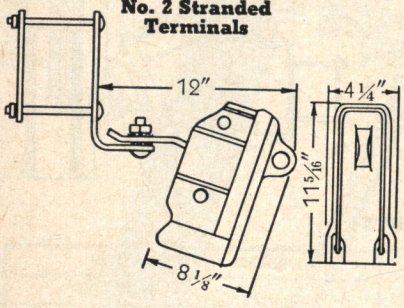
50 Amperes
No. 2 Stranded
Terminals

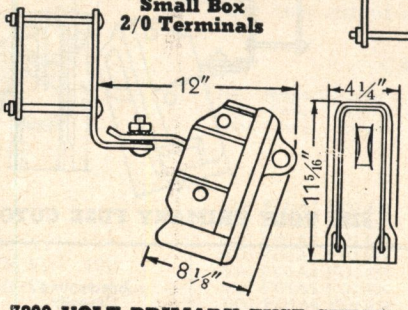


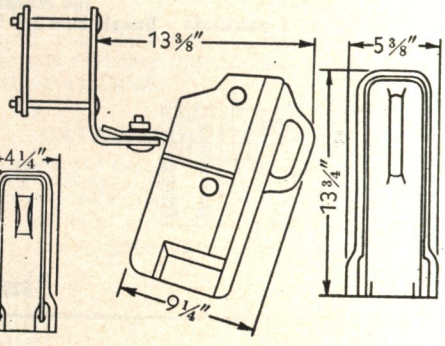
100 Amperes
Small Box
2/0 Terminals



100 Amperes
Large Box
4/0 Terminals







7800 VOLT PRIMARY FUSE CUTOUTS

Rating	Doors Available	Interrupting Capacity rms Amperes	ORDERING INFORMATION		
			Complete Assembly	PARTS	
				Porcelain Box with Contacts Terminals and Hinges	Door Complete with Fuse Cartridge or Switch Blade
50 Amperes	1. Standard duty, non-indicating Type PND 2. Standard duty, indicating Type PVD 3. Heavy duty, indicating Type PHD 4. Disconnect switch non-indicating, 100 amp. 5. Disconnect switch indicating, 100 amp.	1200 amperes 1200 amperes 4000 amperes	**FE1B2** **FE1B1** **FE1B4** **FE1B8** **FE1B7**	**FE1B50** **FE1B50** **FE1B50** **FE1B50** **FE1B50**	**FE1B52** **FE1B51** **FE1B54** **FE1B58** **FE1B57**
100 Amperes Small Box 2/0 Terminals	1. Standard duty, non-indicating Type PND 2. Standard duty, dropout indicating Type PVD 3. Disconnect switch, non-indicating, 200 amp. 4. Disconnect switch, indicating, 200 amp.	3000 amperes 3000 amperes	**FEA1D2** **FEA1D1** **FEA1D8** **FEA1D7**	**FEA1D50** **FEA1D50** **FEA1D50** **FEA1D50**	**FEA1D52** **FEA1D51** **FEA1D58** **FEA1D57**
100 Amperes Large Box 4/0 Terminals	1. Standard duty, non-indicating Type PND 2. Standard duty, indicating Type PVD 3. Heavy duty, indicating Type PHD 4. Disconnect switch, non-indicating, 200 amp. 5. Disconnect switch, indicating, 200 amp.	3000 amperes 3000 amperes 8000 amperes	**FE1D2** **FE1D1** **FE1D6** **FE1D8** **FE1D7**	**FE1D50** **FE1D50** **FE1D50** **FE1D50** **FE1D50**	**FE1D52** **FE1D51** **FE1D56** **FE1D58** **FE1D57**

THE OKONITE COMPANY

MANSON FRICTION TAPE

Premium Quality for Maximum Circuit Security



Unequalled in true adhesiveness and in aging and weathering qualities. Made only with new rubber which thoroughly impregnates and coats the stronger and more closely-woven cotton fabric. Provides lasting protection for joints. Standard roll ¾ in. wide, containing an average of 82 feet, packed in white metal can. Packed 10 cans per unit carton, 10 cartons per case. Other widths available.

OKONITE RUBBER TAPE

Premium Quality for Maximum Circuit Security



Compounded only from new, Up-River, fine Para rubber. When wrapped on the joint, it fuses into a homogeneous wall of tough insulation that is impervious to moisture and remains elastic and resilient. Insure highest electrical strength and permanence. Standard roll ¾ in. wide, containing 30 feet, packed in yellow metal can. Packed 10 cans per unit carton, 10 cartons per case. Other widths available.

OKOLITE HIGH VOLTAGE TAPE

Premium Quality for Maximum Circuit Security



Specially designed for splicing rubber insulated cables made with ozone-resisting compounds and, particularly for those operating at over 2000 volts between phases. Fuses into homogeneous, moisture-proof wall of insulation, high in dielectric strength yet low in specific inductive capacity. Standard roll ¾ in. wide, containing 30 feet, packed in red metal can. Packed 10 cans per unit carton, 10 cartons per case. Other widths available.

OKOPRENE WEATHER RESISTANT TAPE

Premium Quality for Maximum Circuit Security



Made with neoprene, provides permanent, non-fibrous protection for splices in neoprene-sheathed cables. Fuses into tough waterproof sheath which is electrically strong and has unsurpassed resistance to ozone and weather plus excellent all-round physical properties. Standard roll ¾ in. wide, containing 30 feet, packed in blue metal can. Packed 10 cans per unit carton, 10 cartons per case. Other widths available.

PANTHER FRICTION TAPE



An **OKONITE** Product

Made with a strong premium grade fabric, impregnated and multiple-coated with an exclusive, firm compound containing a high percentage of tough, new rubber. Provides exceptional adhesion and excellent mechanical and electrical protection. Standard rolls Nos. 8 (60′), 4 (30′) and 2 (10′), ¾ in. wide, cellophane-wrapped. Packed 10 rolls # 8 per carton, 20 rolls # 4 per carton, 40 rolls # 2 per carton, 10 cartons per case. Other widths available.

PANTHER RUBBER TAPE



An **OKONITE** Product

A high grade rubber splicing tape made with new rubber, it fuses into a solid wall of insulation that is electrically strong, mechanically tough and moisture-resistant. Manufactured and packaged to be absolutely free from impurities, it guarantees maximum safety in electrical work. Standard rolls Nos. 8 (22′) and 4 (10′), ¾ in. wide, cellophane-wrapped. Packed 10 rolls # 8 per carton, 20 rolls # 4 per carton, 10 cartons per case. Other widths available.

PANTHER PLASTIC ELECTRICAL TAPE





Dual-purpose tape which can be used for both insulation and mechanical protection. Approved by Underwriters' Laboratories, Inc. A single thickness withstands 10,000 volts, possesses tensile strength of 20 lb. per inch of width, can stretch 200% without breaking. Provides thin wall of insulation that is particularly suitable for use in confined locations and is easily removed for reterminating. Standard rolls ¾ in. wide. 66 ft. rolls, in black and white cans, packed 5 cans per carton. 30 ft. rolls, cellophane-wrapped, packed 5 in a carton. 20 cartons per case.

DRAGON SPECIFICATION FRICTION TAPE



An **OKONITE** Product

A strong, extra-heavy, closely-woven fabric which is thoroughly impregnated and multiple-coated with an adhesive compound containing a high percentage of tough, new rubber. Mechanically and electrically strong, it meets all ASTM and Federal specification requirements. Specified by many utilities, industrials and transportation companies. Standard roll No. 8 (83′) ¾ in. wide, cellophane-wrapped. Packed in 10 roll carton, 10 cartons per case. Other widths available.

DRAGON SPECIFICATION RUBBER TAPE



An **OKONITE** Product

A superior splicing compound made with tough, resilient, new rubber. Meets all ASTM and Federal Specification requirements. When wrapped on a joint, it fuses into a moisture-tight, electrically strong wall of insulation. Specified by many utilities, industrials and transportation companies. Standard roll No. 8 (30′), ¾ in. wide, cellophane-wrapped. Packed in 10 roll carton, 10 cartons per case. Other widths available.

PLYMOUTH TAPES

PLYMOUTH TAPES

SLIPKNOT BROWN FRICTION TAPE



Introduced a brand new era in friction tape. It's different — it's better — because it's the natural color of raw rubber smoked sheets. Fresh, pure rubber is worked into the fabric. The high content of this raw, brown rubber assures additional strength and lasting adhesive qualities. A real development in tape.



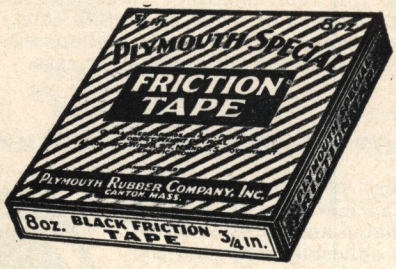
"The Most Widely Used Friction Tape In The World"

SLIPKNOT BLACK FRICTION TAPE

Embodies every standard specification for true quality tapes. Extra adhesive, has no pin holes, and its tensile strength is unusually high. Comes packed in orange and blue containers of No. 1, 2, 4 and 8 rolls.

Prices on application.

PLYMOUTH SPECIAL FRICTION TAPE



Made in strict accordance with the A.S.T.M. specification, and with the United States Government specification. Made in No. 4 and No. 8 rolls only. Has a guaranteed minimum yardage of 82½ feet per roll.

Prices on application.

10 ROLL DISPENSERS



Slipknot Black, Slipknot Brown and P. R. Splice available in handy 10 roll dispensers.

PLYMOUTH TAPES

P. R. SPLICING COMPOUND



Made of highest grade rubber compound. It moulds into one solid mass, making a joint which can never separate, and is guaranteed to withstand a dielectric test at 10,000 volts without puncturing.

Approved by the Underwriters.

Prices on application.

ALSO Plymouth Special Splicing Compound

Made in strict accordance with A.S.T.M. and with U.S. Government specifications. Made No. 4 and No. 8 rolls only with a minimum footage of 30 feet.

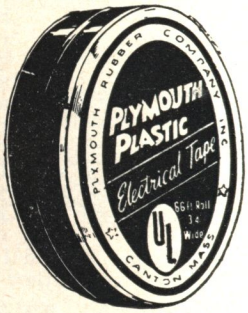
Prices on Application.

PLYMOUTH PLASTIC ELECTRICAL TAPE

Completely approved by the Underwriters to replace the combination of Friction and Rubber Tape. Has excellent Electrical and Physical properties and an outstanding adhesive quality.

Available in ¾" x 66' rolls packed in individual metal cans and in ¾" x 30' rolls in 5 roll dispensers.

Prices on Application.





Plymouth Plastic Electrical Tape also available in colorful display packages containing eighteen ½" x 10' rolls, designed as a counter traffic number, this has proven exceptionally popular throughout the country.

Johns-Manville

7800 WOODLAWN AVE. • CHICAGO 19, ILLINOIS

DUTCH BRAND PRODUCTS



FRICTION TAPES

DUTCH BRAND FRICTION TAPE—An "extra service" tape that has long life, extra strength and is easy to use. One layer resists up to 1800 volts. Combined with DUTCH BRAND Rubber Insulating Tape it produces highest dielectric resistance. Individually boxed and packed in attractive display carton. Each No. 8 roll contains 68 ft. of tape.



No. 51, 52, 54, AND 58 FRICTION TAPE—Is an "Extra Service" DUTCH BRAND Tape. Every roll comes cellophane wrapped in a modern point of sale display carton. Everyone uses Friction Tape—it is standard for electrical, automotive, industrial and general uses.

SPECIAL WIDTH FRICTION TAPE—Available in special widths for large users . . . supplied in widths 3/8, 1/2, 1, 1 1/4, 1 1/2, 2, 3, 4 inches and wider.

"JUMBO" SHOP PACKAGE FRICTION TAPE—Specially packaged 10 No. 8 rolls for the convenience of repairmen, electrical contractors, industrial users and others where individually cartoned tape is not required. The friction tape is the same high quality as furnished in individual cartons. You'll find the "Jumbo" Shop Package an excellent way to buy DUTCH BRAND Friction Tape.



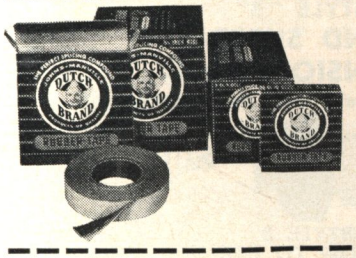
No. 60 RHINO SHOP PACKAGE FRICTION TAPE—contains ten No. 8 rolls, each roll individually cellophane wrapped. The Rhino Shop Package saves money for contractors, maintenance men, and industrial users.



A. S. T. M. FRICTION TAPE—This DUTCH BRAND Friction Tape meets all quality requirements of A. S. T. M. Specification D-69 and U. S. Federal Specifications HH-T-101A. Made of strong, closely woven fabric, it has high dielectric resistance. It will not ravel. Each No. 8 roll contains 82 1/2 feet of tape.



RUBBER TAPES



RUBBER INSULATING TAPE—For perfect insulation, it fuses instantly without heat. It has extra high dielectric strength — resists up to 13500 volts through a single thickness. It is strong, durable and non-corrosive to electrical conductors. Assures positive insulation for high tension lines and other spots where highest dielectric resistance is needed.

"HIPPO" SHOP PACKAGE RUBBER INSULATING TAPE—The "Hippo" Package contains ten No. 8 rolls and provide large users a convenient way to buy rubber insulating tape. It is especially desired by electrical repairmen, electrical contractors and industrial users. The rubber insulating tape is the same high quality as furnished packaged individually. A.S.T.M. Rubber Insulating Tape.



PLASTIC ELECTRICAL TAPES



No. 120 PLASTIC ELECTRICAL TAPE MASTER SHOP PACKAGE—This tape is super thin and is used in places where space is limited. It has 150% stretch, high dielectric resistance, resists weather, water, oils, acids and corrosive chemicals. Because of its thinness and great stretch it conforms readily to irregular surfaces. Package contains 5 rolls 3/4 in. x 44 ft. each.



No. 130 .010 PLASTIC has the general characteristics of regular Plastic except it is heavier for heavy duty work such as winding heavy cables, heavy electrical harness and for use in tape winding machines.

No. 125 PLASTIC ELECTRICAL TAPE DISPLAY CARTON — DUTCH BRAND PLASTIC is also available in an attractive point-of-sale display carton containing two dozen consumer size rolls 1/2 inch by 150 inches. A convenient size for small repair jobs.





No. 126 DISPLAY PLASTIC ELECTRICAL TAPE — Contains 12 rolls 3/4" wide x 20 ft. long. These convenient "tool kit size rolls" are just right for many electrical, radio, television, automotive and household uses.

No. 166 PLASTIC ELECTRICAL TAPE—is a longer —full 66 ft. roll—for larger tape users. Each roll is packaged in an individual lithographed metal can to protect the tape during use or in storage.





No. 121 JUNIOR SHOP PACKAGE PLASTIC ELECTRICAL TAPE — The latest addition to the Plastic line is the No. 121 Junior Shop Package—which holds 5 "Tool Kit Size" rolls. 3/4" x 20 ft. A convenient size for many applications.

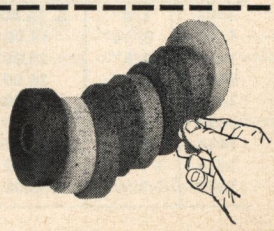
VINYL COLOR TAPE



A real electrical insulating tape with a dielectric of 1000 volts per mil of thickness. U. L. listed.

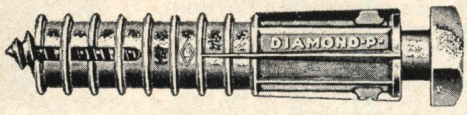
It has excellent adhesive qualities. It is thin and flexible to conform to irregular surfaces. It is washable and water proof, as well as grease and oil proof.

COLOR TAPE comes in nine modern clean colors: red, yellow, green, blue, brown, black, white, silver and gold. No. 108 counter display assortment of 50 rolls, 1/2", 3/4" and 1 1/2" wide, 108' long, assorted colors and No. 118 display of 24 rolls, 1/2" x 108' long, assorted colors. Also No. 128 industrial size rolls 3/8", 1/2", 3/4" and 1" wide, 36 yds. long.



DIAMOND

LAG SCREW EXPANSION SHIELDS



AVAILABLE IN DIE CAST—(SEE BELOW)

Style "P" — Short

Cat. No.	Dia. of Lag	List Per 100	Length	Drill Size	No. Per Box	Shipping Weight Per 100
†1004	1/4"	$ 15.00	1"	1/2"	100	2 lbs.
†1005	5/16"	18.00	1"	1/2"	100	2 1/2
††1006	3/8"	25.00	2"	5/8"	50	7 1/2
††1008	1/2"	38.00	2"	3/4"	50	10
1010	5/8"	45.00	2"	7/8"	50	13
1012	3/4"	65.00	2"	1 1/8"	25	21

Style "P" — Long

†1104	1/4"	$ 15.00	1 1/2"	1/2"	100	4 lbs.
†1105	5/16"	18.00	1 3/4"	9/16"	100	5
††1106	3/8"	25.00	2 3/4"	5/8"	50	11
††1108	1/2"	38.00	3 1/2"	3/4"	50	18
1110	5/8"	45.00	3 1/2"	7/8"	25	23
1112	3/4"	65.00	3 1/2"	1 1/8"	25	35
1114	7/8"	95.00	5"	1 3/8"	25	75
1116	1"	110.00	5"	1 1/2"	25	90
1120	1-1/4"	250.00	8"	1 7/8"	20	270

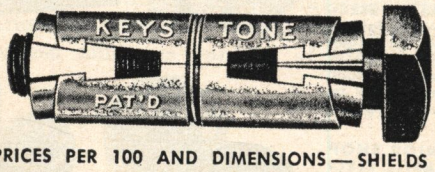
† These sizes furnished in die cast only.

†† Can be supplied in die cast as well as malleable.

NOTE: Prices do not include Lag Screws.

INTERLOCKING KEYSTONE EXPANSION SHIELDS — DOUBLE

FOR USE WITH MACHINE BOLTS



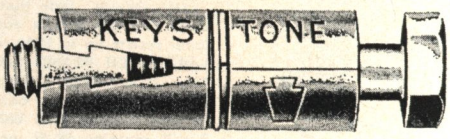
LIST PRICES PER 100 AND DIMENSIONS — SHIELDS ONLY

Double "Keystone"

Cat. No.	Bolt Dia.	List Per 100	Length	Drill Size	No. Per Box	Shipping Weight Per 100
1404	1/4"	$ 15.00	1 1/2"	1/2"	100	4 lbs.
1405	5/16"	18.00	1 3/4"	9/16"	100	6
1406	3/8"	25.00	2"	3/4"	50	7
1408	1/2"	38.00	2 1/2"	7/8"	50	12
1410	5/8"	45.00	2 7/8"	1"	25	18
1412	3/4"	65.00	3 1/4"	1 1/8"	25	35
1414	7/8"	95.00	4"	1 1/2"	25	85
1416	1"	110.00	4 1/4"	1 5/8"	25	100
1420	1-1/4"	250.00	6"	2 1/8"	20	240

KEYSTONE SINGLE EXPANSION SHIELDS

FOR USE WITH MACHINE BOLTS



LIST PRICES PER 100 AND DIMENSIONS — SHIELDS ONLY

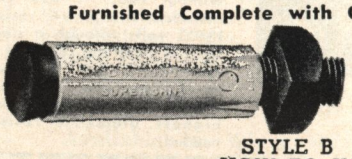
Single "Keystone"

1504	1/4"	$ 15.00	1 3/8"	1/2"	100	3 lbs.
1505	5/16"	18.00	1 3/8"	9/16"	100	4
1506	3/8"	25.00	1 5/8"	3/4"	50	9
1508	1/2"	38.00	1 7/8"	7/8"	50	14
1510	5/8"	45.00	2"	1"	25	19
1512	3/4"	65.00	2 3/4"	1 1/8"	25	38

Note: Use Catalog Numbers, when ordering.

STYLE "B" DIAMOND SUPER-GRIP EXPANSION BOLTS

Furnished Complete with Galvanized Bolts



SUPER-GRIP

® TRADE MARK

STYLE B

HOW TO USE

1. Drill hole (with correct size of drill).
2. Insert Bolt, with shield on—Head first, with threaded end of bolt outside.
3. Place calking tool over bolt and calk lead expansion shield into the hole.

LIST PRICES PER 100—Complete with Galvanized Bolts

Style "B"

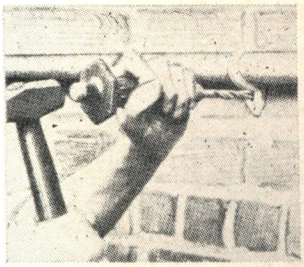
Cat. No.	Size Dia.	Size Length	List per 100	Hole Size	No. per Box	Length of Sleeve
2041A		1 1/2"	$ 9.30			
2042	1/4" x	2"	9.50	7/16"	100	7/8"
2042A		2 1/2"	9.70			
2043		3"	9.90			
2052		2"	11.40			
2052A	5/16" x	2 1/2"	11.80	1/2"	100	1"
2053		3"	12.20			
2062A		2 1/2"	16.10		100	
2063		3"	16.70		100	
2063A	3/8" x	3 1/2"	17.30	9/16"	100	1 3/8"
2064		4"	18.00		100	
2065		5"	19.40		50	
2066		6"	20.10		50	
2083		3"	35.00		100	
2084	1/2" x	4"	39.00	3/4"	100	1 15/16"
2085		5"	43.00		50	
2086		6"	47.00		50	
2103		3"	57.00			
2104	5/8" x	4"	63.00	7/8"	50	2 1/4"
2105		5"	69.00			
2106		6"	75.00			

Note: Use Catalog Numbers, when ordering.

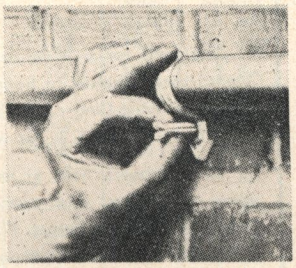
DIAMOND

DIAMOND HAMMER DRIVE ANCHORS DHD

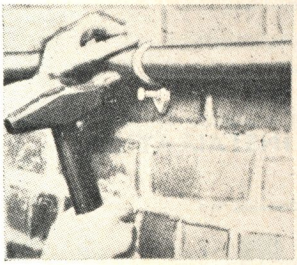
- ◆ Aluminum Shield
- ◆ Smaller Hole
- ◆ Less Drilling
- ◆ More Holding Power
- ◆ Hot Dip galvanized nail included
- ◆ A complete rust proof anchoring unit
- ◆ One piece—nothing to come apart
- ◆ Quicker and easier to install



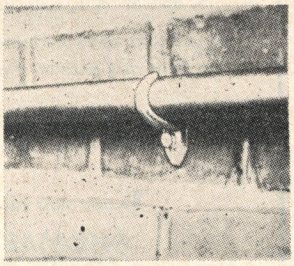
Drill Hole
(same diameter as anchor)
Use DI◆FORGE Drills



Put hardware in place
Insert DHD Anchor
thru hardware



Insert nail
and drive home



The Perfect Anchorage

Catalog No.	Size Diameter	Size Length	List per 100	Drill Size	No. per Box	Weight per 100
4314	3/16	7/8"	$ 8.00	3/16"	100	1 lb.
4320	3/16	1-1/4"	9.00		100	1 1/8
4416	1/4	1"	10.00	1/4"	100	1 1/2
4420	1/4	1-1/4"	11.00		100	2
4424	1/4	1-1/2"	12.00		100	2 1/8
4520	5/16	1-1/4"	14.00	5/16"	100	2 3/4
4528	5/16	1-3/4"	16.00		100	3 1/2
4536	5/16	2-1/4"	18.00		100	4 1/2
4544	5/16	2-3/4"	20.00		100	5
4632	3/8	2"	20.00	3/8"	100	6 1/2
4652	3/8	3-1/4"	25.00		100	8 1/4
4836	1/2	2-1/4"	30.00	1/2"	25	11 1/2
4856	1/2	3-1/2"	35.00		25	15 1/2

DRILL SIZE Use same diameter drill as outside diameter of anchor shown in second column.

Diamond Hammer Drive Anchors are packed with nails in same container.

DIAMOND CALKING ANCHORS

For Use With Machine Screws



Heavier nut and full diameter
Lead alloy sleeve
Free turning threads
Open back type
Calking Tool in each box

How To Use

1. Drill Hole.
2. Calk Anchor in Hole with tool provided in each box.
3. Turn the screw into expanded anchor after passing it through the hardware or material to be fastened.

DIAMOND CALKING ANCHORS WITHOUT SCREWS

Cat. No.	Bolt Size	List per 100	Drill Size	Length	Weight per 100	No. Per Box
3020	6-32	$6.00	1/4"	3/8"	1/2 lbs.	100
3025	8-32	6.50	5/16"	1/2"	1	100
3030	10-24	7.50	3/8"	5/8"	2	50 or 100
3035	12-24	9.50	7/16"	3/4"	3 1/2	50 or 100
3040	1/4-20	11.00	1/2"	7/8"	4 3/4	50 or 100
3050	5/16-18	15.00	5/8"	1"	9	50
3060	3/8-16	20.00	3/4"	1 1/4"	15	50
3070	7/16-14	26.00	7/8"	1 1/2"	20	50
3080	1/2-13	26.00	7/8"	1 1/2"	20	50
3100	5/8-11	50.00	1 1/8"	2"	40	50
3120	3/4-10	75.00	1 1/4"	2 1/4"	62	50

Note: All anchors, sizes 1/4-20 and smaller, furnished with Aluminum Nuts.

DIAMOND MULTI-SIZE SCREW ANCHORS



Made of non-porous lead alloy composition—NOT DIE CAST

Diamond Multi-Size Screw Anchors are designed to accommodate in one anchor several diameters of wood screws. The purpose is to reduce the number of anchors required to accommodate all sizes of screws. They are made in several lengths, covering the majority of uses.

Furnished without Screws

Cat. No.	* Size Screw—Length	List Per 100	Drill Size	Weight Per 100
5212	6- 8 x 3/4"	$ 5.00	1/4"	1 lb.
5216	6- 8 x 1"	5.30	1/4"	1 3/8
5224	6- 8 x 1 1/2"	5.60	1/4"	1 3/4
5312	10-14 x 3/4"	5.60	5/16"	1 1/2
5316	10-14 x 1"	5.60	5/16"	1 3/4
5324	10-14 x 1 1/2"	8.00	5/16"	2 1/2
5516	16-18 x 1"	6.25	3/8"	2 3/4
5524	16-18 x 1 1/2"	9.00	3/8"	4
5628	20-24 x 1 3/4"	10.00	7/16"	5 1/4

* First two numbers show standard size of wood screws which can be used.
Last number shows length of anchor.
All put up in Metal Edge Boxes of 100 Anchors. These Boxes contain 4 small boxes of 25 pieces each.

Note: Use Catalog Numbers, when ordering.

DIAMOND

"SPRING TYPE" TOGGLE BOLTS



STANDARD TOGGLE BOLT LIST
Uniform for All Types
Spring Type

Catalog No.	Size Diam. & Length	List Per 100	Weight Per 100	Drill Size	No. Per Box
7022		2"	$ 8.00	1½ lbs.		
7023	*⅛" x	3"	9.00	1¾	⅜"	50
7024		4"	10.00	2¼		
7032		2"	8.50	3½		
7033		3"	9.50	4		
7034	3/16" x	4"	10.00	4½	½"	50
7035		5"	12.00	5		
7036		6"	12.50	5½		
7043		3"	10.50	7		
7044	¼" x	4"	11.00	8	⅝"	50
7045		5"	14.00	9		
7046		6"	15.50	10		
7053		3"	16.00	11		
7054	5/16" x	4"	17.00	13	⅞"	50
7055		5"	21.50	15		
7056		6"	23.00	17		
7063		3"	21.00	17		
7064	⅜" x	4"	23.00	19	⅞"	25
7065		5"	28.50	22		
7066		6"	30.00	25		
———		3"	37.00	———		
7084	½" x	4"	40.50	42	1⅛"	25
———		5"	52.00	———		
7086		6"	59.00	51		

* The ⅛" is THE ONLY SIZE on which MUSHROOM HEAD BOLTS can be supplied.

ALL TOGGLE BOLTS FURNISHED ZINC PLATED.

"Spring" Type Toggles, furnished with either ROUND or FLAT HEAD Screws. (Specify)

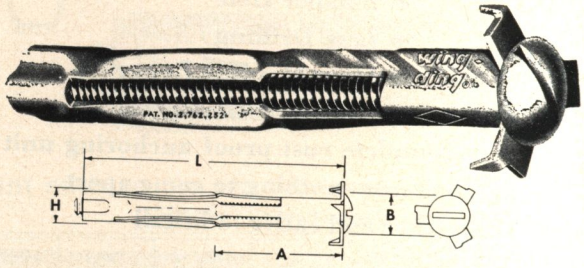
Round Head furnished unless otherwise specified.

TOGGLE HEADS ONLY

Bolt Size	List per 100	
	Steel	Brass
⅛" (6-32)	$ 7.00	$22.40
3/16" (10-24)	7.50	23.10
¼"-20	8.50	24.50
5/16"-18	12.00	33.60
⅜"-16	16.00	———
½"	25.00	———

Note: Use Catalog Numbers, when ordering.

WING-DING HOLLOW WALL ANCHORS



Designed for a wide range of uses from securing cabinets, utensil racks, shelves to hanging pictures, fans and wall decorations. The Wing-Ding comes in two sizes—4 SL for walls 1/16 in. to ¾ in. thick and 5 SL for walls ¼ in. to 1¼ in.

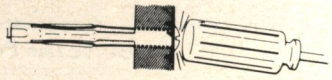
Gripper teeth hold in normal wall surfaces against turning when expanding, and precision engineered tri-prongs expand with a minimum of torque. Prongs are channel shaped and cause a definite stop in the crimping action. 4 SL tested to 300 lbs., 5 SL to 500 lbs.

No special tools required for setting; use standard size drills —¼ in. and 5/16 in. and screwdriver.

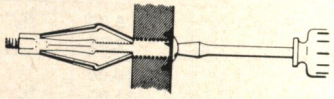
Removable when necessary without damaging wall by bending up flaps and pushing through hole. Installs on ½ in. centers.

FOUR STEP INSTALLATION

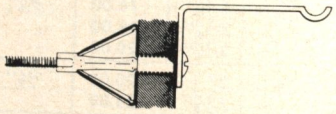
1. DRILL HOLE (See Dimension "H")



2. INSERT WING-DING . . . A LIGHT TAP WILL SET THE THREE GRIPPER TEETH. IN HARD WOOD PUSH TEETH IN WITH THE SCREW DRIVER.



3. TIGHTEN UP SCREW UNTIL EXPANDED—YOU'LL KNOW WHEN IT'S SET—YOUR SCREWDRIVER TELLS YOU!

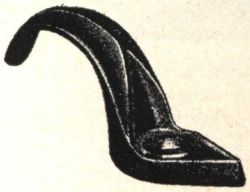


4. REMOVE SCREW . . . PLACE FIXTURE OVER THE WING-DING, RE-INSERT SCREW AND TIGHTEN.

Cat. No.	A	B	H	L	List per 100
7922-4SL	⅞"	5/16"	¼"	2"	$8.00
7823-5SL	1⅜"	5/16"	5/16"	2¾"	12.00

DIAMOND

DIAMOND MALLEABLE ONE-HOLE CLAMPS



FOR CONDUIT, PIPE AND CABLE

Diamond Malleable Iron Clamps are hot dipped galvanized, "Diamond" Process, annealed twice before galvanizing to assure ductility. Will not crack in installation.

FOR STANDARD CONDUIT — ORDER BY PIPE SIZE

Catalog No.	Pipe Size	List per 100	Cable Size	Standard Pkg.	Approx. Sh. Wt. Per 100
MC-25	1/4"	SEE DISCOUNT SHEET FOR LIST PRICES	.50"	100	3 lbs.
MC-38	3/8"		.67"	100	4 lbs.
MC-50	1/2"		.84"	100	5½ lbs.
MC-75	3/4"		1.05"	100	6 lbs.
MC-100	1"		1.31"	100	11 lbs.
MC-125	1 1/4"		1.66"	50	17 lbs.
MC-150	1 1/2"		1.90"	50	25 lbs.
MC-200	2"		2.37"	50	46 lbs.
MC-250	2 1/2"		2.87"	50	100 lbs.
MC-300	3"		3.50"	35	157 lbs.
MC-350	3 1/2"		4.00"	25	158 lbs.
MC-400	4"		4.50"	25	201 lbs.

Order by Pipe Size.

DIAMOND BRIDLE RINGS



Style A, C, E, F



Style K, M, Q, R

If wood screw type used in masonry use multi-size screw anchors

WOOD SCREW THREAD (Hot Dip Galvanized or Enameled)

Cat. No.	Style	List Per 100 Galv.	List Per 100 Enam.	Eye	Weight Per 100 Galv.	Weight Per 100 Enam.
810	A	$ 7.50	$18.00	1 5/8"	11 lbs.	15 lbs.
812	C	6.50	16.50	1 1/4"	9½ lbs.	12½ lbs.
814	E	3.00	10.50	5/8"	3½ lbs.	5 lbs.
816	F	27.00	52.00	3"	30 lbs.	33½ lbs.

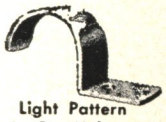
Opening in all sizes 5/16"

MACHINE SCREW THREAD (Hot Dip Galvanized Only)

Cat. No.	Style	List per 100	Eye	Thread	Wt. per 100
821	K	$4.40	3/4"	10-24	4 lbs.
823	M	4.70	1 1/4"	10-24	6 lbs.
825	Q	9.80	1 1/4"	1/4-20	9.5 lbs.
827	R	10.40	1 5/8"	1/4-20	11 lbs.

Bridle Rings with Machine Screw Thread, are used with Insulator Supports. TAPPED—10-24 or 1/4-20 as indicated.

FOR THINWALL CONDUIT (EMT) SPECIFY (TYPE S)



Light Pattern One-Hole

DIAMOND ONE-HOLE STEEL CLAMPS

Made of Cold Rolled Mild Steel annealed and Diamond Hot Galvanized after forming.

ONE HOLE STANDARD TYPE

Cat. No.	List per 100	Cable Size	Nearest Pipe Size	Nearest Thinwall Conduit	Size Stock	Est. Ship. Wt. per 100
L-3	$ .60	3/16"	.....	.....	1/2" x .072"	1 lb.
L-4	.75	1/4"	.....	.....	1/2" x .062"	1 lb.
L-5	.85	5/16"	.....	.....	1/2" x .062"	1 lb.
L-6	.95	3/8"	1/8"	.....	1/2" x .048"	1 lb.
L-7	1.05	7/16"	.....	.....	1/2" x .048"	1.1 lbs.
L-8	1.15	1/2"	1/4"	3/8"	1/2" x .048"	1.2 lbs.
L-9	1.20	9/16"	.....	.....	1/2" x .048"	1.2 lbs.
L-10	1.25	5/8"	.....	.....	1/2" x .048"	1.3 lbs.
L-11	2.25	11/16"	3/8"	1/2"	5/8" x .062"	3 lbs.
L-12	2.85	3/4"	1/2"	.....	11/16" x .062"	4.5 lbs.
L-14	3.00	7/8"	.....	3/4"	11/16" x .062"	5.0 lbs.
L-16	3.45	1"	3/4"	.....	3/4" x .080"	7.0 lbs.
L-18	3.60	1 1/8"	.....	1"	3/4" x .080"	7.5 lbs.
L-20	4.95	1 1/4"	1"	.....	7/8" x .115"	15 lbs.
L-24	6.65	1 1/2"	.....	1 1/4"	7/8" x .115"	16 lbs.
L-26	7.10	1 5/8"	1 1/4"	.....	7/8" x .115"	17 lbs.
L-28	7.30	1 3/4"	.....	1 1/2"	7/8" x .115"	19 lbs.
L-30	7.45	1 7/8"	1 1/2"	.....	7/8" x .115"	20 lbs.

Std. Pkg. L3-L14, 500 pcs., L16-L18, 250 pcs., L20-L30, 100 pcs.

DIAMOND DRIVE RINGS

For use with the new Neoprene jacketed Drop and Block Wires.

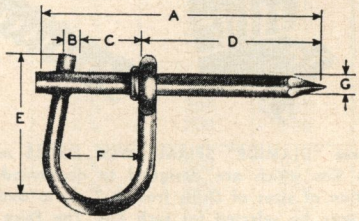
These new sizes of Drive Rings have larger loops to increase the wire carrying capacity in order to accommodate (6) Neoprene jacketed drop wires in the 5/8" Size, and (16) Neoprene jacketed drop wires in the 7/8" Size.

ALL "DIAMOND" Drive Rings are made so that the striking end is elevated above the Ring, making it easy to drive without bending the ring or pin.

Hot Dip Galvanized—by "DIAMOND" Process, eliminating flaking of the galvanizing if pin is bent to 45° angle.

This insures ease of installation and freedom from danger of flying chips of zinc striking the operator.

When Drive Rings are used for installation in masonry, use D H D (DIAMOND HAMMER DRIVE ANCHORS).



Cat. No.	Size	List Per 100	A	B	C	D	E	F	G	Lbs. Per 100	D.H.D. Size
801	1/2"	$1.80	2 1/16	.120	1/4	1 3/8	3/4	1/2	.120	1.8	3/16x7/8
804	5/8"	3.30	2 1/4	.135	1/2	1 7/16	1 1/8	5/8	.165	3.8	1/4x1
805	7/8"	4.80	2 9/16	.177	5/8	1 1/2	2 1/16	7/8	.165	6.4	1/4x1

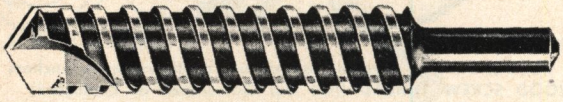
Packing: 1/2"—50 to box; 5/8" and 7/8"—25 to box.

DIAMIDE

REG. TRADE MARK

SPIRAL TWIST CARBIDE TIPPED MASONRY DRILL

FOR FAST ROTARY DRILLING



STEEP SPIRAL FLUTE FOR . . .

- Fast, complete dust removal • No Binding of Drill
- Drills full depth without stopping or removing Drill •

CARBIDE TIP AND DRILL STOCK SAME DIAMETER FOR . . .

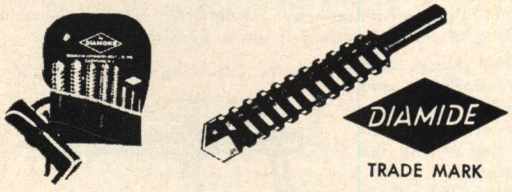
- Better support of tip, eliminating bent shanks and no overhang on tip to cause snagging
- Heavier, Stronger Shanks • Less Breakage
- MORE ACCURATE HOLES, STRAIGHT HOLES, No "creeping" of Drill • Lower drilling cost
- Easier, faster drilling, less effort; and the drill runs cooler

MADE IN THE FOLLOWING SIZES:

Catalog Number	Nominal Diameter	List Price Each	Shank	Overall Length
7703	3/16"	$ 2.03	1/4"	3"
7704	1/4"	2.03	1/4"	4"
7705	5/16"	2.19	1/4"	4"
7706	3/8"	2.40	1/4"	4"
7707	7/16"	2.70	1/4"	4"
7708-A	1/2"	3.03	1/4"	4"
7708-B	1/2"	3.03	3/8"	6"
7709-A	9/16"	3.38	3/8"	6"
7710	5/8"	3.71	1/2"	6"
7711	11/16"	4.22	1/2"	6"
7712	3/4"	4.73	1/2"	6"
7714	7/8"	5.73	1/2"	6"
7716	1"	8.10	1/2"	6"
7718	1 1/8"	9.79	1/2"	6"
7720	1 1/4"	11.81	1/2"	10"
7724	1 1/2"	14.51	1/2"	10"

NOTE: FOR EXTRA LENGTH CARBIDE TIPPED MASONRY DRILLS, ASK FOR BULLETIN NO. 255-C.

DRILL KITS



TRADE MARK

These "DIAMIDE" SPIRAL TWIST DRILLS may be secured in Cloth Kits which are designed to accommodate 8 Drills. Any selection of sizes of Drills from 3/16" up to and including the 1" size, may be selected for such Kits. The Price will be governed by the sizes of Drills furnished. See the suggested Kits—Numbers 1, 2, 3 and 4 listed below:

DIAMIDE SPIRAL TWIST DRILL SET COMBINATIONS IN CANVAS KITS

Set No.	Contains 1 each of Drills Below in Kit	List per Set
1	1/4" 5/16" 3/8" 1/2" 5/8" 3/4"	$18.09
2	3/16" 1/4" 5/16" 3/8" 1/2" 5/8"	15.39
3	1/4" 5/16" 3/8" 1/2"	9.65
4	3/16" 1/4" 3/8" 1/2"	9.50

DI ◇ FORGE TWIST DRILLS

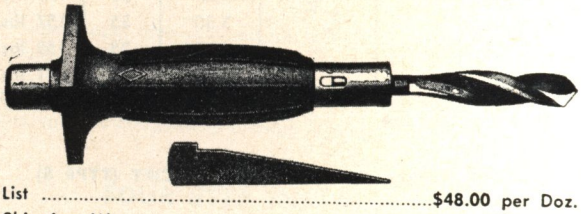
REG. TRADE MARK



Catalog No.	Diameter	List per Dozen	Length Over-all	Depth of Hole	Weight per Dozen
720-3	3/16"	$10.80	2 3/4"	1 3/8"	1/2 lb.
720-4	1/4"	10.80	3 3/8"	1 3/4"	3/4 lb.
720-5	5/16"	12.80	4 3/8"	2 1/2"	1 lb.
720-6	3/8"	14.80	5 1/8"	3"	1 1/4 lbs.
720-7	7/16"	18.80	5 1/4"	3 1/4"	1 1/2 lbs.
720-8	1/2"	22.80	5 1/2"	3 1/4"	2 lbs.
720-9	9/16"	26.80	5 7/8"	3 3/4"	2 1/2 lbs.
720-10	5/8"	28.80	6 1/8"	4"	2 1/2 lbs.

Drop-forged Vanadium Tool Steel. For hand drilling in masonry. Rotate between hammer blows in clockwise direction. NOTE: Use with "A", "B" or "C" Drill Holders.

Style "C" Rubber Grip (Cat. No. 755)



List .....$48.00 per Doz.
Shipping Wt. .....10½ Lbs. per Doz.

DI ◇ FORGE TWIST DRILL KIT

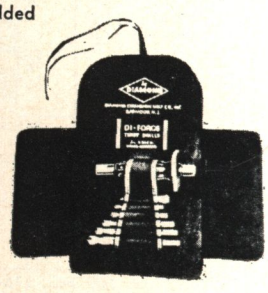
REG. TRADE MARK



To meet the constantly increasing demand for Drills put up in convenient Kits we have now added DI ◇ FORGE Twist Drills.

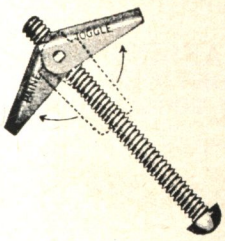
EACH KIT CONSISTS OF

1—Style "C" Rubber Grip Drill Holder
1—3/16" DI◇FORGE Twist Drill
1—1/4" " Twist Drill
1—5/16" " Twist Drill
1—3/8" " Twist Drill
1—1/2" " Twist Drill
1—Attractive Cloth Kit



List Price—$11.50 per Kit

Note: Use Catalog Numbers, when ordering.



Series No. 1000

PAINE SPRING WING TOGGLE BOLTS

For use in hollow materials including wood, gypsum, marble, lath and plaster, tile and sheet rock.

ALL STEEL, BRIGHT ZINC PLATED BOLTS AND WINGS ASSEMBLED



Style A Round Head | Style B Square Nut | Style C Flat Head | Style D Tapped Flat Head | Style E Button Head

Part No.	Bolt Dia.-TPI-Lgth.	Price Per 100	Head Style Stocked	Wire Gauge Threads, per Inch	For Free Fit, Drill Hole	Spread of Wings	Standard Shipping Container	Weight per 1000
1007	*6-32 x 1¾	$6.60	A B C E	6–32	7/16"	1 5/16"	500	14
1008	6-32 x 2	8.00	A B C E	6–32	7/16"	1 5/16"	500	15
1010	6-32 x 3	9.00	A B C E	6–32	7/16"	1 5/16"	500	19
1011	6-32 x 3½	10.00	A B	6–32	7/16"	1 5/16"	500	20
1012	6-32 x 4	10.00	A B C E	6–32	7/16"	1 5/16"	500	21
1013	6-32 x 5	12.00	A B C	6–32	7/16"	1 5/16"	500	25
1014	6-32 x 6	12.50	A B C	6–32	7/16"	1 5/16"	500	29
1108	8-32 x 2	8.50	A B C E	8–32	½"	1 7/16"	500	23
1110	8-32 x 3	9.50	A B C	8–32	½"	1 7/16"	500	28
1110T	8-32 x 3	11.50	D**	8–32	½"	1 7/16"	500	28
1112	8-32 x 4	10.00	A B C	8–32	½"	1 7/16"	500	31
1113	8-32 x 5	12.00	A B	8–32	½"	1 7/16"	500	33
1114	8-32 x 6	12.50	A B	8–32	½"	1 7/16"	500	35
1208	*10-24 x 2	8.50	A B C E	10–24	9/16"	1 15/16"	500	33
1209	10-24 x 2½	9.50	A B	10–24	9/16"	1 15/16"	500	36
1210	10-24 x 3	9.50	A B C E	10–24	9/16"	1 15/16"	500	38
1211	10-24 x 3½	10.00	A B	10–24	9/16"	1 15/16"	500	42
1212	10-24 x 4	10.00	A B C E	10–24	9/16"	1 15/16"	500	45
1213	10-24 x 5	12.00	A B C	10–24	9/16"	1 15/16"	500	51
1214	10-24 x 6	12.50	A B C	10–24	9/16"	1 15/16"	500	58
1216	10-24 x 8	15.75	B	10–24	9/16"	1 15/16"	250	71
1218	10-24 x 10	20.00	B	10–24	9/16"	1 15/16"	250	80
1308	1/4 x 2	9.00	A B C E	1/4–20	¾"	2"	500	58
1309	1/4 x 2½	10.50	A B	1/4–20	¾"	2"	500	63
1310	1/4 x 3	10.50	A B C E	1/4–20	¾"	2"	500	68
1311	1/4 x 3½	11.00	A B	1/4–20	¾"	2"	500	73
1312	1/4 x 4	11.00	A B C E	1/4–20	¾"	2"	500	75
1313	1/4 x 5	14.00	A B C	1/4–20	¾"	2"	500	88
1314	1/4 x 6	15.50	A B C	1/4–20	¾"	2"	500	99
1316	1/4 x 8	20.00	A B ***	1/4–20	¾"	2"	250	118
1318	1/4 x 10	25.00	A B ***	1/4–20	¾"	2"	250	125
1410	5/16 x 3	16.00	A B C	5/16–18	⅞"	2⅜"	250	100
1412	5/16 x 4	17.00	A B C	5/16–18	⅞"	2⅜"	250	118
1413	5/16 x 5	21.50	A B C	5/16–18	⅞"	2⅜"	250	135
1414	5/16 x 6	23.00	A B C	5/16–18	⅞"	2⅜"	250	155
1416	5/16 x 8	25.00	B	5/16–18	⅞"	2⅜"	250	180
1418	5/16 x 10	30.50	B	5/16–18	⅞"	2⅜"	250	205
1510	3/8 x 3	21.00	A B C	3/8–16	1"	2¾"	250	160
1512	3/8 x 4	23.00	A B C	3/8–16	1"	2¾"	250	180
1513	3/8 x 5	28.50	A B C	3/8–16	1"	2¾"	250	205
1514	3/8 x 6	30.00	A B C	3/8–16	1"	2¾"	250	231
1516	3/8 x 8	40.00	B	3/8–16	1"	2¾"	250	280
1518	3/8 x 10	45.00	B	3/8–16	1"	2¾"	250	330
1610	1/2 x 3	40.50	A B	1/2–13	1 5/16"	4½"	125	405
1612	1/2 x 4	40.50	A B C	1/2–13	1 5/16"	4½"	125	435
1613	1/2 x 5	52.00	A B C	1/2–13	1 5/16"	4½"	125	460
1614	1/2 x 6	59.00	A B C	1/2–13	1 5/16"	4½"	125	500
1616	1/2 x 8	65.00	B	1/2–13	1 5/16"	4½"	125	580
1618	1/2 x 10	70.00	B	1/2–13	1 5/16"	4½"	125	640

* 6-32 or ⅛, 10-24 or 4/16.
** Style D Head has tapped hole with 3-48 thread for use with rosettes.

*** Bolts have 6" of thread.
Part numbers 1007 through 1318 packed 50 to a box, all others 25 to a box.

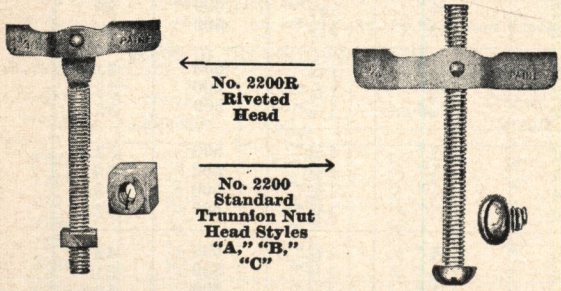
PAINE RIVETED SPRING WING TOGGLE BOLTS



Cat. No.	Bolt Dia. x Lgth.	Price Per 100	Drill Hole In.	Spread of Wings, In.	Wt. Lbs. Per 1000
1410R	5/16 x 3	$19.00	3/4	2 1/4	100
1412R	5/16 x 4	20.00	3/4	2 1/4	115
1413R	5/16 x 5	25.50	3/4	2 1/4	135
1414R	5/16 x 6	27.00	3/4	2 1/4	155
1510R	3/8 x 3	21.00	3/4	2 1/4	125
1512R	3/8 x 4	23.00	3/4	2 1/4	150
1513R	3/8 x 5	28.50	3/4	2 1/4	175
1514R	3/8 x 6	30.00	3/4	2 1/4	200

5/16, 3/8, and 1/2 packed 25 to a box all others 50 to a box.

PAINE "PB" ONE-PIECE TOGGLE BOLTS



No. 2200R has the toggle riveted to the flattened bolt end; and insures smooth, instantaneous action — up and down. One end of toggle is heavier than the other, causing the toggle to pivot to closed position.

No. 2200 is balance weighted for easy pivot action, like No. 2200R; but the bolt attaches to the toggle by means of a trunnion nut at the toggle end.

All steel, bright zinc plated.

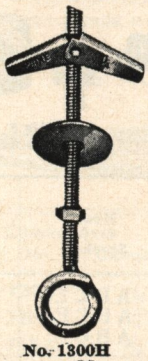
Add A, B, C, D or E to catalog numbers for complete identification.

Cat. No. Std.	Cat. No. Riveted	Bolt Dia. x Lgth.	Price Per 100	Drill Holes, In. No. 2200R	Drill Holes, In. No. 2200	Wing Spread In.	Wt. Per 100
2010		6-32x3	$9.00	....	3/8	1 1/2	3 1/2
2012		6-32x4	10.00	....	3/8	1 1/2	4
2013		6-32x5	12.00	....	3/8	1 1/2	4 1/2
2014		6-32x6	12.50	....	3/8	1 1/2	5
2210	2210R	10-24x3	9.50	1/2	9/16	1 7/8	4 1/2
2212	2212R	10-24x4	10.00	1/2	9/16	1 7/8	5
2213	2213R	10-24x5	12.00	1/2	9/16	1 7/8	5 3/4
2214	2214R	10-24x6	12.50	1/2	9/16	1 7/8	6 1/2
2310	2310R	1/4x3	10.50	9/16	3/4	2 1/4	7
2312	2312R	1/4x4	11.00	9/16	3/4	2 1/4	8 1/2
2313	2313R	1/4x5	14.00	9/16	3/4	2 1/4	10
2314	2314R	1/4x6	15.50	9/16	3/4	2 1/4	10 3/4
2410		5/16x3	16.00	3/4	7/8	2 3/8	11 1/2
2412		5/16x4	17.00	3/4	7/8	2 3/8	13 1/2
2414		5/16x6	23.00	3/4	7/8	2 3/8	16
2510		3/8x3	21.00	3/4	15/16	2 3/4	14
2512		3/8x4	23.00	3/4	15/16	2 3/4	17 1/2
2514		3/8x6	30.00	3/4	15/16	2 3/4	24 1/2

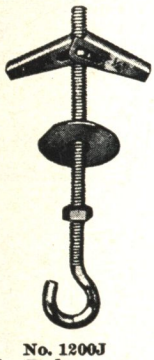
Packed 50 to a carton.

PAINE SPECIAL HANGING AND FASTENING DEVICES

SPECIAL SPRING WING TOGGLE BOLTS



Complete with Nut and Washer



No. 1300H Bridle Ring Toggle Bolts

Cat. No.	Bolt Dia. x Lgth.	Price Per 100	Length Thread In.	Drill Hole In.	Opening of Eye In.	Inside Diam. of Eye In.
1313H	1/4x5 1/4	$21.00	4	3/4	5/16	5/8
1314H	1/4x6	21.60	4	3/4	5/16	1 1/4

No. 1200J Toggle With Eye Bolt

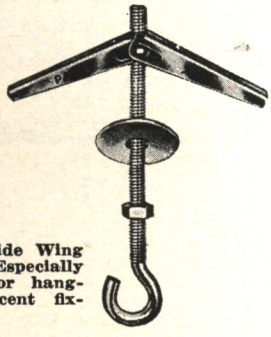
1210J	10-24x3	14.50	2	9/16	3/16	5/16
1212J	10-24x4	15.50	3	9/16	3/16	5/16
1213J	10-24x5	16.00	4	9/16	3/16	5/16
1214J	10-24x6	16.90	5	9/16	3/16	5/16
1310J	1/4x3	15.50	1 3/4	3/4	5/16	1/2
1312J	1/4x4	16.85	2 3/4	3/4	5/16	1/2
1313J	1/4x5	17.50	3 3/4	3/4	5/16	1/2
1314J	1/4x6	18.15	4 3/4	3/4	5/16	1/2

Packed 50 to a box.

KING SIZE TOGGLE BOLTS



Extra Wide Wing Spread. Especially designed for hanging fluorescent fixtures.



No. 1200K Spring Wing Toggle Bolts

(Add A, B, or C to catalog number for complete identification.)

Cat. No.	Bolt Dia. x Lgth.	Price Per 100	Drill Hole In.	Spread of Wings In.	Wt. Lbs. Per 100
1210K	10-24 x 3	$18.00	9/16	2 5/8	3 3/4
1212K	10-24 x 4	19.00	9/16	2 5/8	4 1/2
1213K	10-24 x 5	20.00	9/16	2 5/8	5 1/8
1214K	10-24 x 6	21.00	9/16	2 5/8	5 3/4
1310K	1/4 x 3	22.00	3/4	4	9 3/4
1312K	1/4 x 4	23.00	3/4	4	10 3/4
1313K	1/4 x 5	24.00	3/4	4	12
1314K	1/4 x 6	25.00	3/4	4	13

No. 1200KJ Toggle with Eye Bolt

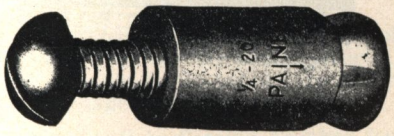
Cat. No.	Bolt Dia. x Lgth.	Price Per 100	Lgth. of Thread In.	Drill Hole In.	Diam. of Eye In.	Opng. of Eye In.
1212KJ	10-24 x 4	$23.30	3	9/16	5/16	3/16
1214KJ	10-24 x 6	25.00	5	9/16	5/16	3/16
1312KJ	1/4 x 4	28.60	2 3/4	3/4	1/2	5/16
1314KJ	1/4 x 6	32.00	4 3/4	3/4	1/2	5/16

Packed 50 to a box.

PAINE EXPANSION ANCHORS

For Use in Concrete, Stone, Marble, Tile, Slate and Other Materials—Furnished in Two Styles

MACHINE SCREW LEAD TYPE ANCHORS



No. 9000

Specifications—Anchors only.

Packed 50 in a box. Setting Tool furnished in every box.

Cat. No.	Anchor Size No.	Price Per 100	Min. Dimens. of Inches Holes Required Diam.	Depth	Wt. Lbs. Per 1000	Avg. Breaking Point Lbs.
9010	6–32	$6.00	5/16	½	10	746
9015	8–32	6.50	5/16	½	10	1034
9020	10–24	7.50	⅜	5/8	20	1204
9025	12–24	9.50	½	⅞	40	2252
9030	¼–20	11.00	½	⅞	40	2620
9035	5/16–18	15.00	5/8	1	76	3854
9040	⅜–16	20.00	¾	1½	126	4204
9045	½–13	26.00	⅞	1½	204	5584
9050	5/8–11	50.00	1⅛	1¾	375	10398
9055	¾–10	75.00	1¼	2¼	640	12500
9060	⅞– 9	120.00	1½	2¾	1100	14000
9065	1– 8	180.00	1¾	3½	1920	16000

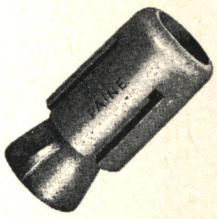
SETTING TOOLS FOR No. 9000 ANCHORS



No. 3000

Cat. No.	Mach. Screw Size	Price Per 100	Cat. No.	Mach. Screw Size	Price Per 100
3010	6–32	$22.00	3040	⅜–16	$23.00
3015	8–32	22.00	3045	½–13	50.00
3020	10–24	23.00	3050	5/8–11	120.00
3025	12–24	25.00	3055	¾–10	180.00
3030	¼–20	25.00	3060	⅞– 9	210.00
3035	5/16–18	33.00	3065	1– 8	250.00

STEEL EXPANSION ANCHORS



No. 9350

For use where particular care must be taken to avoid damage to the mounting surface. Ideal for anchoring in tile, concrete block and solid masonry. Require only shallow, small diameter holes and no setting tool is needed.

Screws not included.

Bright Zinc Plated

Cat. No.	Screw Dia. In.	Drill Hole, In. Dia.	Depth	Wt. Lbs. Per 100	Price Per 100
9355	10–24	⅜	1	1.2	$7.50
9356	¼–20	½	1¼	3.3	11.00

PAINE EXPANSION ANCHORS

For Use in Concrete, Tile, Marble, Brick and Other Solid Materials

BOLT AND NUT TYPE ANCHORS



No. 9100



No. 9200

No. 9100 Series Cat. No.	Price Per 100	Wt. Lbs. Per 1000	No. 9200 Series Cat. No.	Price Per 100	Wt. Lbs. Per 1000	Bolt Dia.xLgth. Inches
9101	$8.20	62	9201	$8.80	72	¼x1½
9102	8.35	68	9202	8.95	78	¼x1¾
9103	8.40	70	9203	9.00	80	¼x2
9104	8.65	75	9204	9.25	85	¼x2½
9105	8.90	80	9205	9.50	90	¼x3
9106	9.15	85	9206	9.75	95	¼x3½
9107	9.40	90	9207	10.00	100	¼x4
	Drilling: Dia. ½"—Depth 1".					
9110	13.90	150	9210	15.00	170	⅜x2
9111	14.40	156	9211	15.50	176	⅜x2½
9112	14.90	167	9212	16.00	187	⅜x3
9113	15.40	185	9213	16.50	205	⅜x3½
9114	15.90	203	9214	17.00	223	⅜x4
9115	17.90	260	9215	19.00	280	⅜x6
	Drilling: Dia. ⅝"—Depth 1½".					
9120	31.00	334	9220	34.00	394	½x3
9121	35.00	383	9221	38.00	443	½x4
9122	44.00	500	9222	47.00	560	½x6
	Drilling: Dia. ⅞"—Depth 1⅝".					

Also can be furnished with lock nuts or lock washers. Prices on request.

Packed 50 in box with set tool.

LEAD SLEEVES AND CONES

For No. 9100 and 9200 Anchors

BULK PACKED

SLEEVES Bolt Dia.	Part No.	List Price per 100	Wgt. per 100	CONES Bolt Dia.	Part No.	List Price per 100	Wgt. per 100
¼	3201	$ 4.00	3	¼	3301	$ 2.50	1
⅜	3202	5.00	6	⅜	3302	3.50	2
½	3203	12.00	13	½	3303	6.00	6

SETTING TOOL

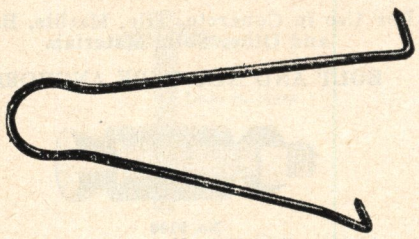
Series No. 3100

For Bolt and Nut Anchors Nos. 9100 and 9200

One furnished in each box of anchors.

List Price per 100 Bolt Dia.	Part No.	Set Tool	Weight per 100
¼	3101	$25.00	15
⅜	3102	40.00	27
½	3103	50.00	60

PAINE PIPE HOOKS



No. 6100

Paine Pipe Hooks have two nail-sharp drive points, made with an offset bend for easy hammering, and are formed for a tight, pressure fit around pipes to eliminate pipe vibration.

For Pipe Size	4" Cat. No.	4" Price Per 100	6" Cat. No.	6" Price Per 100	8" Cat. No.	8" Price Per 100	10" Cat. No.	10" Price Per 100
⅜	6104	$3.00	6106	$3.50	6108	$4.00	61010	$4.50
½	6114	3.00	6116	3.50	6118	4.00	61110	4.50
¾	6124	3.00	6126	3.50	6128	4.00	61210	4.50
1	6134	3.00	6136	3.50	6138	4.00	61310	4.50
1¼	6144	3.00	6146	3.50	6148	4.00	61410	4.50
1½	6154	3.00	6156	3.50	6158	4.00	61510	4.50
2	6164	3.00	6166	3.50	6168	4.00	61610	4.50

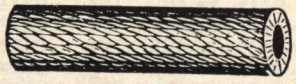
Wt. Lbs. per 1000: 4"—56; 6"—79; 8"—99; 10"—117.

PAINE FIBER WOOD SCREW PLUGS

For use in concrete, stone, plaster, brick, tile, bakelite, metal, slate, glass, marble and other materials. Hole need not be plumb. No setting tool required. Packed 50 to box.



Easily cut with sharp pliers



Important—The Fiber Anchor should generally be as long as the threaded part of screw and as large as diameter of screw.

Cat. No.	Fiber Plug No.	Fiber Plug L. In.	Price Per 100	†	•
9601	6	x ⅝	$2.70	5-6	5/32
9602	6	x ¾	2.80		
9603	6	x1	3.00		
9611	8	x ¾	3.20	7-8	11/64
9612	8	x1	3.40		
9613	8	x1¼	3.60		
9614	8	x1½	3.80		
9621	10	x ¾	3.40	9-10	3/16
9622	10	x1	3.80		
9623	10	x1¼	4.20		
9624	10	x1½	4.60		
9631	12	x1	4.60	11-12	1/4
9632	12	x1¼	5.00		
9633	12	x1½	5.40		
9634	12	x2	6.20		
9641	14	x1	5.40	14 or ¼" lag sc.	9/32
9642	14	x1¼	6.00		
9643	14	x1½	6.60		
9644	14	x2	7.80		
9651	16	x1	$6.10	16 or ¼" lag sc.	5/16
9652	16	x1¼	6.90		
9653	16	x1½	7.60		
9654	16	x2	9.10		
9661	20	x1	9.00	20 or ⅜" lag sc.	3/8
9662	20	x1½	11.00		
9663	20	x2	13.00		
9671	⅜	x1½	19.00	⅜" lag sc.	7/16
9672	⅜	x2	20.00		
9673	⅜	x2½	21.00		
9674	⅜	x3	22.00		
9681	½	x2	32.00	½" lag sc.	5/8
9682	½	x2½	33.00		
9683	½	x3	34.00		

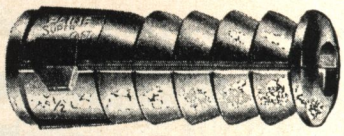
†Use Wood Screw No.

•Drill Hole Dia. In.

PAINE DIE-CAST LAG SCREW SHIELDS

For Use in Concrete, Marble, Tile, Slate, Brick, Stone and Other Materials

Installed Without A Setting Tool



No. 9800

Standard Packing Unit—1/4, 5/16, 3/8, and 1/2 in. in boxes of 50.

Cat. No.	Screw Size In.	Price Per 100	Length Long	Length Short	Drill Hole In.	Wt. Lbs. Per 100 Long	Wt. Lbs. Per 100 Short	Threads per Inch
9805	1/4	$15.00	1½	1	½	4	3	10
9810	5/16	18.00	1¾	1	9/16	6	3	9
9815	3/8	25.00	2⅝	2	⅝	10½	8½	7
9820	1/2	38.00	3⅜	2	¾	17	12	6

PAINE BRASS EXPANSION SHELLS

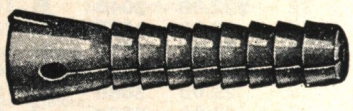


No. 9300

Complete with Screws

Cat. No.	Bolt, In. Dia. x Lgth.	Price Per 100	Drilling, In. Diam.	Drilling, In. Depth	Wt. Lbs. Per 100
9301	6–32 x 1	$4.50	5/16	1	2
9302	6–32 x 1½	4.60	5/16	1	2½
9303	6–32 x 2	5.00	5/16	1	3
9311	8–32 x 1	4.50	5/16	1	2¼
9312	8–32 x 1½	4.60	5/16	1	2¾
9313	8–32 x 2	5.00	5/16	1	3¼

PAINE LEAD WOOD SCREW SHIELDS



No. 9500

For use in concrete, stone, brick, tile, bakelite, metal slate, marble and other materials. Hole need not be plumb. No setting tool required.

Packed 50 to a box.

Cat. No.	Size, Inches Screw	Size, Inches Shield	Price Per 100	Ap. Dia. of Screws In.	Drill Hole In.	Wt. Lbs. Per 100
9501	6	x ¾	$4.40	1/8	¼	2
9502	6	x 1½	4.40	1/8	¼	3½
9510	8-10	x ¾	5.00	3/16	5/16	1¾
9511	8-10	x1	5.00	3/16	5/16	2⅛
9512	8-10	x1½	6.25	3/16	5/16	3¼
9540	12–14	x ¾	5.60	¼	⅜	2⅛
9541	12–14	x 1	5.60	¼	⅜	2⅝
9542	12–14	x 1½	8.00	¼	⅜	4⅞
9550	16–18	x 1	6.25	5/16	7/16	4¼
9551	16–18	x 1½	10.00	5/16	7/16	6¼
9560	20–24	x 1½	15.00	⅜	9/16	10½
9561	20–24	x 2	20.00	⅜	9/16	14

PAINE STAR DRILLS
4-POINT FORGED TYPE



No. 3750

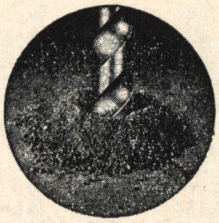
Made of heavy, specially forged, finest tool steel. This enables drill to hold its edge much longer than ordinary drills in standing up under hard and prolonged usage.

Add length of drill to Catalog Number for complete identification.

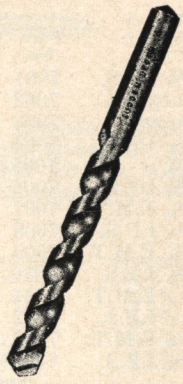
Length Inches	Price Per Doz.	Wt. Lbs. Per Doz.	Inches Length	Per Doz. Price	Per Doz. Wt. Lbs.
No. 375—1/4" Dia.			**No. 376—5/16" Dia.**		
8	$8.25	¾	8	$8.25	1½
12	8.50	1¼	12	8.50	2⅛
18	11.00	2	18	11.00	3¼
24	13.50	2½	24	13.50	4¼
No. 377—3/8" Dia.			**No. 378—7/16" Dia.**		
8	8.25	1⅛	8	8.70	2¼
12	8.50	3¼	12	9.00	3⅛
18	11.00	5	18	11.50	5¼
24	13.50	6½	24	.....	.....
No. 379—1/2" Dia.			**No. 380—9/16" Dia.**		
8	9.65	3⅛	8	11.65	4¼
12	10.00	4¾	12	12.00	6¼
18	12.50	7½	18	15.00	9½
24	15.00	9¾	24	17.50	13¼
No. 381—5/8" Dia.			**No. 382—3/4" Dia.**		
8	11.65	4¾	8	13.70	5¼
12	12.00	7¼	12	14.00	8½
18	15.00	11¼	18	17.50	13
24	17.50	15¼	24	20.00	17½
No. 383—7/8" Dia.			**No. 384—1" Dia.**		
8	15.30	8¼	8	17.00	9½
12	16.00	10½	12	18.00	13
18	20.00	16	18	22.50	19½
24	22.50	21½	24	25.00	27
No. 385—1–1/" Dia.			**No. 386—1–1/4" Dia.**		
8	.....	.....	8	.....	.....
12	24.00	15½	12	30.00	27
18	28.00	28¾	18	35.00	39¾
24	32.00	37	24	40.00	52

Small sizes 12 to a package; larger sizes 6 to package.

PAINE "SUDDEN DEPTH" CARBOLOY TIPPED DRILLED BITS
WITH AUTOMATIC DUST EJECTION



Made of finest tool steel with famous, diamond-hard Carboloy Tip. New, additional backing for the cutting edge creates a faster, cleaner action.



CARBOLOY Tip — holds edge many times longer than ordinary drills.

New and improved design, with fast 44 degree spiral, wider oval flute, and narrow land, provides a smooth path for Automatic Dust Ejection. No dust explosion. No dust to dig or blow out of the hole.

Fast, cool, operation permits maximum drill speeds with no binding. No cooling agent needed. No damage to glazed surfaces and other fragile materials. Can be used in any hand or slow speed power drill. Especially designed for expansion anchor installations.

Spiral Flute Specifications

Cat. No.	Nominal Diam. Inches	Price Each	Dimensions in Inches: Shank Diam.	Shank Lgth.	Overall Drill Lgth.	Min. Actual Diam.
3603	3/16	**$1.80**	11/64	.....	3	.198
3604	¼	**1.80**	15/64	.....	4	.260
3605	5/16	**1.95**	¼	1½	4	.328
3606	⅜	**2.15**	¼	1¼	4	.390
3607	7/16	**2.40**	¼	1½	6	.458
3608*	½	**2.70**	15/32	.....	6	.525
3608A	½	**2.70**	¼	1½	6	.525
3609	9/16	**3.00**	½	1½	6	.587
3610	5/8	**3.30**	½	1½	6	.650
3611	11/16	**3.75**	½	1½	6	.712
3612	¾	**4.20**	½	1½	6	.775
3614	⅞	**5.10**	½	1½	6	.905
3616	1	**7.20**	½	1½	6	1.030

Straight Flute Specifications

3618	1⅛	**8.70**	½	1⅝	6	1.160
3620	1¼	**10.50**	½	1⅝	10	1.285
3624	1½	**12.90**	½	1⅝	10	1.535

*No. 3608 drill with 15/32-inch shank will be furnished on all orders for ½-inch drills unless otherwise specified.

All drills are individually packed, complete with instructions.

"SUDDEN DEPTH" DRILLS IN KITS

In handy, roll-up holders with individual drill pockets. Holders are made of durable material with bound edges.

No. 3675 Kit No. 1—Light Duty Anchoring Kit. One each of four sizes: 3/16"–¼"–5/16"–⅜" ..each **$7.70**

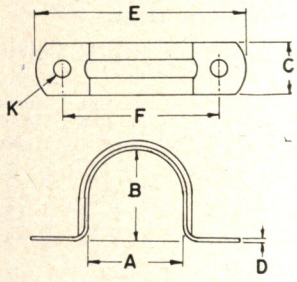
No. 3680 Kit No. 2—Heavy Duty Anchoring Kit. One each of 3 sizes: ½"*–⅝"–¾" .....each **$10.20**

No. 3685 Kit No. 3—Handyman Kit. One each of 3 sizes: ¼"–⅜"–½"* .....each **$6.65**

*No. 3608A drill furnished in these kits.

PAINE PIPE AND ROMEX STRAPS

Paine Pipe Straps are manufactured from electro-galvanized steel strip. They have no sharp corners or edges and are beaded for extra strength. Paine Pipe Straps are designed to support pipes, thin wall conduit (Electric Metallic Tubing), thick wall (Rigid) conduit, and armored cables. Pipe or conduit size stamped on each Paine strap.

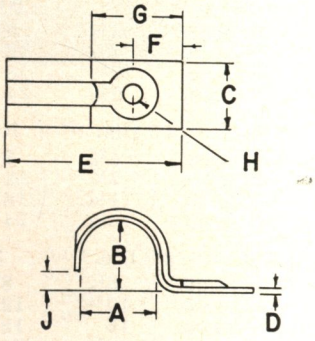


Series No. 7000

Specifications

2 Hole Galvanized Pipe Straps
Series No. 7000

Pipe or Conduit Size	Part No.	Pieces per Pound	A	B	C	D	E	F	K
⅛ I.P.S.	7001	120	.405	.375	½	.028	1¾	1 5/16	⅛
Baby BX	7002	124	.531	.468	⅜	.028	1 23/32	1 9/32	⅛
Romex	7003	117	.406	.250	⅝	.028	1⅝	1 3/16	3/16
¼ I.P.S.	7004	90	.540	.510	⅝	.028	1 27/32	1 7/32	3/16
BX	7005	90	.540	.510	⅝	.028	1 27/32	1 7/32	3/16
⅜ I.P.S.	7006	78	.675	.645	⅝	.028	2 1/32	1 13/32	3/16
½ E.M.T.	7007	71	.706	.676	⅝	.028	2 1/16	1 7/16	3/16
½ I.P.S.	7008	60	.840	.810	⅝	.028	2 7/16	1 11/16	3/16
¾ E.M.T.	7009	36	.922	.892	¾	.035	2¾	1⅞	1/64
¾ I.P.S.	7010	33	1.050	1.020	¾	.035	2 29/32	2 3/32	1/64
1 E.M.T.	7011	21	1.164	1.134	⅞	.045	3 3/16	2 5/16	1/64
1 I.P.S.	7012	18	1.315	1.285	⅞	.045	3⅜	2 13/32	1/64
1¼ E.M.T.	7013	17	1.510	1.480	⅞	.045	3½	2⅝	1/64
1¼ I.P.S.	7014	15	1.660	1.630	⅞	.045	3 23/32	2 27/32	1/64
STRAPS BELOW ARE NOT BEADED									
1½ E.M.T.	7015	8	1.740	1.690	1¼	.062	3⅞	3¼	1/64
1½ I.P.S.	7016	7	1.900	1.850	1¼	.062	4	3⅜	1/64
2 E.M.T.	7017	6½	2.197	2.147	1¼	.062	4 5/16	3 11/16	1/64
2 I.P.S.	7018	6	2.375	2.325	1¼	.062	4½	3⅞	1/64
2½ I.P.S.	7019	5½	2.875	2.825	1¼	.062	5	4⅜	1/64
3 I.P.S.	7020	4½	3.50	3.450	1¼	.062	5⅝	5	1/64
3½ I.P.S.	7021	4	4.00	3.950	1¼	.062	6⅛	5½	1/64
4 I.P.S.	7022	3½	4.50	4.450	1¼	.062	6⅝	6	1/64



Series No. 8000

PIPE AND ROMEX STRAPS

Specifications

1 Hole Galvanized Pipe Straps
Series No. 8000

Pipe or Conduit Size	Part No.	Pieces per Pound	A	B	C	D	E	F	G	H	J
Romex	8003	108	½	9/32	9/16	.028	1½	½	13/16	5/32	—
¼ I.P.S.	8004	83	.540	7/16	⅝	.035	1⅜	⅜	11/16	7/32	1/16
BX	8005	83	.540	7/16	⅝	.035	1⅜	⅜	11/16	7/32	1/16
⅜ I.P.S.	8006	60	.675	⅝	¾	.035	1 13/32	13/32	27/32	¼	⅛
½ E.M.T.	8007	60	.675	⅝	¾	.035	1 13/32	13/32	27/32	¼	⅛
½ I.P.S.	8008	30	.840	¾	⅞	.045	2⅛	⅝	1⅛	¼	⅛
¾ E.M.T.	8009	26	.937	27/32	⅞	.045	2 9/32	⅝	1 7/32	¼	1/16
¾ I.P.S.	8010	26	1.050	15/16	⅞	.045	2 11/32	⅝	1⅛	¼	¼

E.M.T.—Electric Metallic Tubing or Thinwall Conduit.
I.P.S.—Iron Pipe Size or Rigid Conduit.

List of May 1, 1956

PIPE STRAPS BY THE PIECE

Pipe or Conduit Size	Part No. 2 Hole	List Price per 100 Pcs.	Pieces per Pkg.
Romex	7703	$1.00	100
¼ I.P.S.	7704	1.45	100
BX	7705	1.45	100
⅜ I.P.S.	7706	1.60	100
½ E.M.T.	7707	1.60	100
½ I.P.S.	7708	1.85	100
¾ E.M.T.	7709	2.50	50
¾ I.P.S.	7710	2.50	50
1 E.M.T.	7711	3.20	50
1 I.P.S.	7712	3.90	50

Pipe or Conduit Size	Part No. 1 Hole	List Price per 100 Pcs.	Pieces per Pkg.
Romex	8703	$1.00	100
¼ I.P.S.	8704	1.25	100
BX	8705	1.25	100
⅜ I.P.S.	8706	1.50	100
½ E.M.T.	8707	1.50	100
½ I.P.S.	8708	1.60	100
¾ E.M.T.	8709	2.00	50
¾ I.P.S.	8710	2.30	50
1 E.M.T.	....	....	50
1 I.P.S.	....	....	50

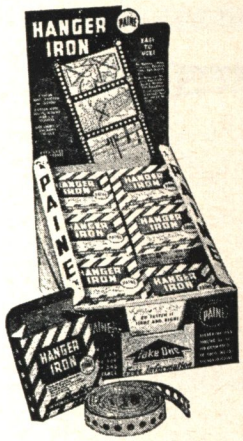
SERIES NOS. 7000 AND 8000

Pipe or Conduit Size	PACKED IN 5 LB. CARTONS Part No. 2 Hole	List Price per 100 lbs.	Part No. 1 Hole	List Price per 100 lbs.	BULK PACKED IN 50 LB. CTNS. Part No. 2 Hole	List Price per 100 lbs.	Part No. 1 Hole	List Price per 100 lbs.
⅛ I.P.S.	7501	$57.50	....	....	7001	$52.00	....	....
Baby BX	7502	62.50	....	....	7002	57.50	....	....
Romex	7503	55.00	8503	$57.50	7003	50.00	8003	$52.50
¼ I.P.S.	7504	55.00	8504	57.50	7004	50.00	8004	52.50
BX	7505	55.00	8505	57.50	7005	50.00	8005	52.50
⅜ I.P.S.	7506	55.00	8506	57.50	7006	50.00	8006	52.50
½ E.M.T.	7507	55.00	8507	57.50	7007	50.00	8007	52.50
½ I.P.S.	7508	55.00	8508	57.50	7008	50.00	8008	52.50
¾ E.M.T.	7509	55.00	8509	62.50	7009	50.00	8009	57.50
¾ I.P.S.	7510	55.00	8510	57.50	7010	50.00	8010	52.50
1 E.M.T.	7511	57.50	....	....	7011	52.50	....	....
1 I.P.S.	7512	55.00	....	....	7012	50.00	....	....
1¼ E.M.T.	7513	57.50	....	....	7013	52.50	....	....
1¼ I.P.S.	7514	55.00	....	....	7014	50.00	....	....
1½ E.M.T.	7515	55.00	....	....	7015	50.00	....	....
1½ I.P.S.	7516	55.00	....	....	7016	50.00	....	....
2 E.M.T.	7517	55.00	....	....	7017	50.00	....	....
2 I.P.S.	7518	55.00	....	....	7018	50.00	....	....
2½ I.P.S.	7519	67.50	....	....	7019	62.50	....	....
3 I.P.S.	7520	67.50	....	....	7020	62.50	....	....
3½ I.P.S.	7521	67.50	....	....	7021	62.50	....	....
4 I.P.S.	7522	67.50	....	....	7022	62.50	....	....

PAINE HANGER IRON

SALE-MAKING DEALER DISPLAY

¾-20 COILED PERFORATED HANGER IRON



Paine Perforated Hanger Iron, in ¾-inch wide, 20 gauge, zinc plated steel, earns a place in every tool box. The 10-ft. coiled lengths are compact for storage, can be twisted or bent, for a multitude of purposes in homes, factories, and on the farm. Will support 500 lbs. safely.

Bolts never bind in the accurate perforations and the milled, burr-free edges are kind to the user's hands.

Holes, on ½-inch centers, take ¼-inch bolts.

In Merchandiser Display—No. 500M-1: Twenty-four individually-boxed, 10-ft. coils in Merchandiser Carton. Weight 20 lbs. per carton.
No. 500M-1, 24 Unit Merchandiser.....each **$9.36**

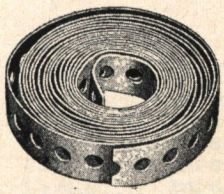
In Individual Packages—No. 500C-1: The compact 10-ft. coils fit in a sturdy, red-yellow-and-blue package. Packed 25 10-ft. coils to shipping container. Weight 20 lbs.
No. 500C-1 Shipping container.....each $9.70

No. 500C-100: One 100 ft. coil individually packed in shipping carton. Weight 80 lbs. per 1000 ft.
No. 500C-100 .....per 1000 ft. **$50.00**

In Bulk—No. 500A: Same high quality product without individual packaging. Packed 500 ft. to carton. Weight 80 lbs. per 1000 ft.
No. 500A, Bulk.....per 1000 ft. **$42.50**

⅞x18 COILED PERFORATED HANGER IRON

Coils are ⅞-inch wide, 18 gauge, zinc plated steel. Holes on ½-inch centers, take ¼-inch bolts. Bulk packed.

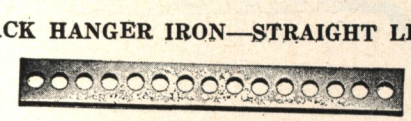


No. 501A

No. 501A: Fifty 10-ft. coils to bag. Weight 160 lbs. per 1000 ft.....per 1000 ft. **$70.00**

No. 501-B: Fifty 10-ft. straight lengths to bundle. Weight 160 lbs. per 1000 ft.....per 1000 ft. **$77.00**

BLACK HANGER IRON—STRAIGHT LENGTHS



For supporting pipe, cable, conduit, fluorescent lighting fixtures and many other devices.

Cat. No.	Width In.	Ga.	Price Per 1000 Feet Black	Price Per 1000 Feet Galv.	Bolt Size	Hole Centers	Safe Load Lbs.	Wt. Lbs. Per M Feet
500	¾	16	$52.50	$102.25	¼"	½"	540	130
501	⅞	16	58.50	117.00	¼"	½"	685	160
502	1	14	70.75	141.50	⅝"	⅝"	975	250
504	1¼	12	126.50	253.00	⅜"	¾"	1580	380

Packed in 10 ft. straight lengths, 500-ft. to bundle except No. 504 100-ft. to bundle. Special perforations or special sizes — prices on request.

PAINE FLATTENED END LAG SCREWS



No. 650

Made from finest quality steel; precision rolled, gimlet pointed and equipped with stove bolt at flattened end. Accurately threaded for use with lag screw shield. Packed 50 to box. Complete with zinc plated stove bolts.

Cat. No.	Size Inches	Price Per 100	Wt. Lbs. Per 1000	Size Bolt Used, In.
650-0	¼x3	$8.00	40	⅛x¾
650-1	⅛x3½	10.00	77½	¼x¾
650-2	⅜x4	12.00	110	¼x¾
650-3	½x5	16.00	245	⅛x¾

PAINE HANGER RINGS AND BOLTS



No. 6000

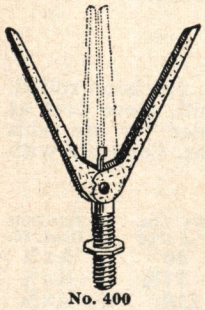
Paine Hanger Rings and Bolts are designed for supporting pipe, conduit and armored cable — 14 different sizes to fit various diameters. Rings are plated and are equipped with plated bolt and nut. Pipe or conduit size marked on each ring.

Cat. No.	Ring for Pipe Size In.	Price Per 100	Width of Steel In.	Gauge of Steel	Size of Bolt Inches	Wt. Lbs. Per 100
6001	⅜	$6.30	½	18	⅛ x ¾	4
6002	½	8.75	⅞	18	¼ x ¾	6¾
6003	¾	8.75	⅞	18	¼ x ¾	7½
6004	1	10.30	⅞	18	¼ x ¾	9¼
6005	1¼	11.00	⅞	18	¼ x ¾	10¼
6006	1½	11.60	⅞	18	¼ x ¾	11
6007	2	13.40	⅞	18	¼ x ¾	12½
6008	2½	20.85	1¼	16	¼ x ¾	27
6009	3	23.70	1¼	16	⅛ x ¾	32
6010	3½	25.50	1¼	16	⅛ x ¾	35
6011	4	28.60	1¼	16	⅛ x ¾	39
6012	5	33.40	1¼	16	⅛ x ¾	47
6013	6	37.90	1¼	16	⅛ x ¾	54

Packed: ⅜ to 1½-in. 50 to carton; 2 thru 6-in. 25 to carton.

PAINE OUTLET BOX AND FIXTURE HANGER

For Use in Tile and Metal Ceilings, also Lath and Plaster Walls and Ceilings



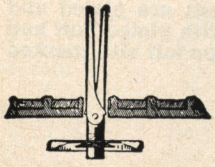
No. 400

The Paine Outlet Box and Fixture Hangers are the easiest to install and most serviceable hangers ever designed. They are very easily adapted for use in tile and metal ceilings and lath and plastered walls and ceilings. This time and labor-saving convenience guarantees a neat and rapid installation. Outlet boxes can be attached to hanger before they are placed in position.

It consists of two wings, each mounted on a ⅜-inch nipple which is 2¼ inches long. Through the center of the nipple is a key which locks the wings when they are in open position. The nipple is fitted with a lock-nut to hold the outlet box against the wall or ceiling. The wings are 5½ inches long, providing 11 inches of holding surface when open. They may be installed in an opening as small as 1⅛ inches in diameter.

No. **400** Outlet Box and Fixture Hanger .....per 100 **$67.00**

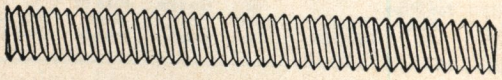
Packed 50 to carton; shipping weight 30 lbs. per 100.





Wings fold together as illustrated through hole in wall or ceiling and open to anchoring position when inserted. Key locks wings securely.

PAINE CONTINUOUS THREADED ROD



Nos. 6200 and B6200

Paine Threaded Rod is manufactured from free-machining rod and has accurate cut threads. This rod should be heated before being bent or formed.

Two and three-foot lengths are stocked. Special lengths and special threading available for prompt delivery — prices on application.

Packed bulk.

Cat. No. Steel	List Price Per 100 Ft.	Screw Size In.	Cat. No. Brass	List Price Per 100 Ft.	Steel or Brass Wt. Lbs. Per 100
6201	**$8.50**	6-32	**B-6201**	**$15.50**	3½
6202	**9.10**	8-32	**B-6202**	**18.00**	5
6203	**9.85**	10-24	**B-6203**	**23.00**	7½
6204	**9.85**	10-32	**B-6204**	**23.00**	7½
6205	**12.40**	12-24	**B-6205**	**30.25**	9½
6206	**14.75**	¼-20	**B-6206**	**35.00**	12½
6207	**16.25**	¼-27	**B-6207**	**38.50**	12½
6208	.....	¼-28	**B-6208**	.....	....
6209	**18.50**	5/16-18	**B-6209**	**51.50**	20
6210	**23.80**	⅜-16	**B-6210**	**65.00**	27½
6211	**32.50**	7/16-14	**B-6211**	.....	40
6212	**39.15**	½-13	**B-6212**	**112.00**	53
6213	**54.80**	⅝-11	**B-6213**	**165.00**	74
6214	**80.50**	¾-10	**B-6214**	**240.00**	120
6215	**116.00**	⅞-9	**B-6215**	.....	167
6216	**143.65**	1-8	**B-6216**	.....	220

PAINE SPECIAL HANGING AND FASTENING DEVICES

FLATTENED END MACHINE SCREWS

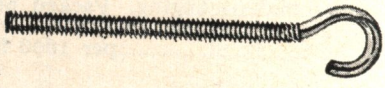
Series No. FE 2500—Furnished Without Stove Bolts



Part. No.	Bolt Overall Dia. Length	List Price Per 100	Length of Thread	Dia. of Pierced Hole	Approx. Weight Per 1000
FE 2501	10-24 x 2	**$4.95**	1	5/32	11
FE 2502	10-24 x 3	**5.70**	2	5/32	17
FE 2503	10-24 x 4	**6.75**	3	5/32	23
FE 2505	10-24 x 6	**8.65**	5	5/32	35
FE 2511	¼-20 x 2	**5.50**	⅞	7/32	22
FE 2512	¼-20 x 3	**6.30**	1⅞	7/32	32
FE 2513	¼-20 x 4	**7.55**	2⅞	7/32	42
FE 2515	¼-20 x 6	**9.60**	4⅞	7/32	62
FE 2521	5/16-18 x 2	**6.25**	⅞	9/32	33
FE 2522	5/16-18 x 3	**7.30**	1⅞	9/32	50
FE 2523	5/16-18 x 4	**8.50**	2⅞	9/32	67
FE 2525	5/16-18 x 6	**11.25**	4⅞	9/32	100
FE 2531	⅜-16 x 2	**7.05**	⅞	9/32	49
FE 2532	⅜-16 x 3	**8.35**	1⅞	9/32	72
FE 2533	⅜-16 x 4	**10.00**	2⅞	9/32	98
FE 2535	⅜-16 x 6	**13.25**	4⅞	9/32	147
FE 2541	½-13 x 2	**9.70**	⅞	11/32	87
FE 2542	½-13 x 3	**12.40**	1⅞	11/32	131
FE 2543	½-13 x 4	**15.50**	2⅞	11/32	175
FE 2545	½-13 x 6	**23.00**	4⅞	11/32	263

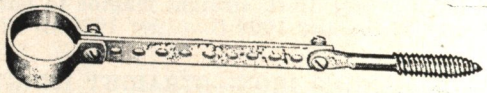
EYE BOLTS

Series No. EB 2750—Fully Threaded



Part No.	Bolt Overall Dia. Length	List Price Per 100	Length of Thread	Inside Diameter of Eye	Opening of Eye
EB 2752	10-24 x 3	**$6.90**	2	5/16	3/16
EB 2753	10-24 x 4	**8.25**	3	5/16	3/16
EB 2755	10-24 x 6	**9.65**	5	5/16	3/16
EB 2762	¼-20 x 3	**8.05**	1¾	½	5/16
EB 2763	¼-20 x 4	**9.40**	2¾	½	5/16
EB 2765	¼-20 x 6	**10.70**	4¾	½	5/16

COMBINATION PIPE OR CONDUIT HANGERS

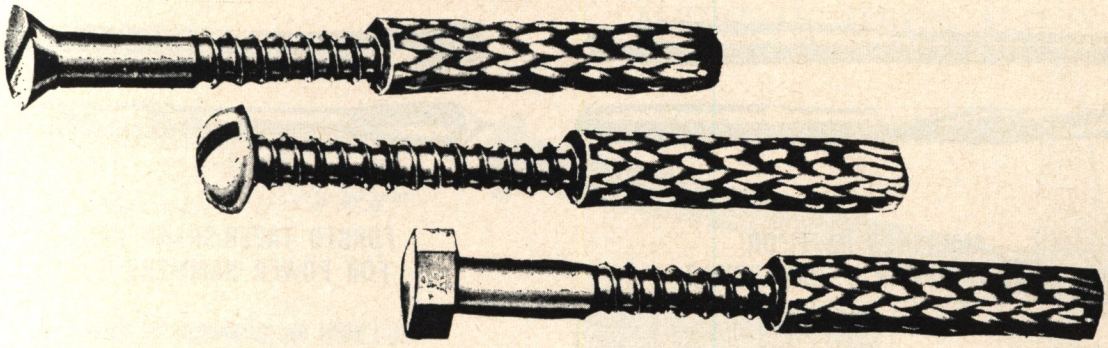


Series No. 5600

Part No.	Ring for Pipe Size	List Price per 100	Lag Screw Used Dia. Length	Weight per 100
5601	½	**$18.75**	¼ x 3	30
5602	¾	**20.75**	5/16 x 3½	31¼
5603	1	**22.30**	5/16 x 3½	31¼
5604	1¼	**23.00**	5/16 x 3½	31¼
5605	1½	**23.60**	5/16 x 3½	31¼
5606	2	**27.40**	⅜ x 4	50
5607	2½	**34.85**	⅜ x 4	75
5608	3	**37.70**	⅜ x 4	81
5609	3½	**43.50**	½ x 5	88
5610	4	**46.60**	½ x 5	100

All sizes carried in stock. Sizes packed in boxes of 50. Unassembled.

THE RAWLPLUG COMPANY, INC.
RAWL PLUGS



The universal screw anchor—can be used in any material.

Rawlplugs require smaller hole, absorb shock and vibration.

No need for hole spotting or layout; caulking or expanding.

Use Rawlplug same length as threaded portion of screw. Drill hole of diameter specified and same length as Rawlplug. Screw size should correspond to Rawlplug size.

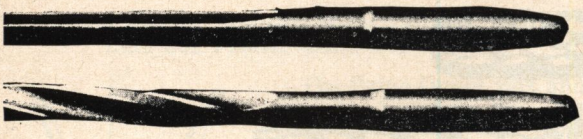
FOR SHEET METAL SCREWS AND STANDARD WOOD SCREWS

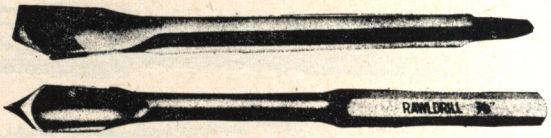
Cat. No.	Rawlplug Size	List Price per 100	Rawl-drill Size & Diam.	Pkd. in Boxes of	Wt. lbs. St. Pack. (10 boxes)
9001	6 x 5/8"	**$2.70**	#6 (5/32")	100	1
9003	3/4"	**2.80**			1
9005	1"	**3.00**			1¼
9009	8 x 5/8"	**3.10**	#8 (11/64")	100	1¼
9011	3/4"	**3.20**			1¼
9013	1"	**3.40**			1¾
9015	1¼"	**3.60**			2
9017	1½"	**3.80**			2
9019	2"	**4.20**			2
9024	10 x 3/4"	**3.40**	#10 (3/16")	100	1½
9026	1"	**3.80**			2
9028	1¼"	**4.20**			2¼
9030	1½"	**4.60**			2¾
9032	2"	**5.40**			2¾
9037	12 x 3/4"	**4.20**	#12 (1/4")	100	2
9039	1"	**4.60**			3
9041	1¼"	**5.00**			4
9043	1½"	**5.40**			4½
9045	2"	**6.20**			4½
9050	14 x 1"	**5.40**	#14 (9/32")	100	3¾
9052	or ¼" 1¼"	**6.00**			4½
9054	lag 1½"	**6.60**			5
9055	screw 1¾"	**7.20**			5½
9056	2"	**7.80**			6½
9061	16 x 1"	**6.10**	#16 (5/16")	50	2
9063	1½"	**7.60**			3
9065	2"	**9.10**			4
9070	20 x 1"	**9.00**	#20 (3/8")	50	3
9072	or 1½"	**11.00**			4½
9074	5/16" lag screw 2"	**13.00**			6¼
9076	22 x 2"	**13.00**	#20 (3/8")	50	7¾

FOR LAG SCREWS

Cat. No.	Rawlplug Size	List Price per 100	Rawl-drill Size & Diam.	Pkd. in Boxes of	Wt. lbs. St. Pack. (10 boxes)
9078	3/8x1½"	**$19.00**	7/16"	25	3
9080	2"	**20.00**			3¾
9082	2½"	**21.00**			4½
9084	3"	**22.00**			5½
9086	7/16x1½"	**26.00**	½"	25	3¾
9087	2"	**27.00**			4
9088	2½"	**28.00**			4½
9089	3"	**29.00**			6¼
9090	1/2x1½"	**31.00**	5/8"	25	6¼
9091	2"	**32.00**			6¼
9092	2½"	**33.00**			7
9093	3"	**34.00**			8½
9094	3½"	**35.00**			9
9095	5/8x2½"	**38.00**	¾"	25	9
9096	3"	**39.00**			11
9097	3½"	**40.00**			12½

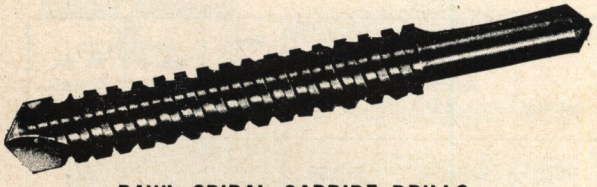
THE RAWLPLUG COMPANY, INC.
RAWL DRILLS





MACHINED (M/T) OR TWIST TYPE (R/T) RAWLDRILLS

Cat. No. M/T	Cat. No. R/T	Size	List Price per Doz.	Use Rawl Drill Holder No.	Packed in Boxes of	Wt. lbs. per Doz.
8106	8156	#6 (5/32")	**$11.50**	14	12	¼
8108	8158	#8 (11/64")	**11.50**	14	12	¼
8110	8160	#10 (3/16")	**11.50**	14	12	¼
8111		#10x5"	**14.50**	14	12	½
8112	8162	#12 (1/4")	**11.50**	14	12	½
8113		#12x6"	**14.50**	14	12	¾
8114	8164	#14 (9/32")	**12.50**	14	12	½
8116	8166	#16 (5/16")	**13.60**	20	12	1
8120	8170	#20 (3/8")	**15.70**	20	12	1¼
8124	8174	7/16"	**31.00**	20	12	1½
	8177	1/2"	**34.00**	20	6	2
	8180	5/8"	**45.00**	20	6	2¾
	8183	3/4"	**60.00**	20	6	4



RAWL SPIRAL CARBIDE DRILLS

Cat. No.	Nominal Diam.	List Price Each	Length Overall	Shank Diam.	Packed in Boxes of	Wt. lbs. per Doz.
8500	1/8"	**$2.03**	2½"	1/8"	12	¼
8502	(5/32") #6	**2.03**	3"	5/32"	12	¼
8504	(11/64") #8	**2.03**	3"	11/64"	12	⅓
8506	(3/16") #10	**2.03**	3"	3/16"	12	⅓
8508	(1/4") #12	**2.03**	4"		12	¾
8510	(9/32") #14	**2.19**	4"	1/4"	12	¾
8512	(5/16") #16	**2.19**	4"		12	1
8514	(3/8") #20	**2.40**	4"		12	1
8516	7/16"	**2.70**	6"	3/8"	6	1½
8520	1/2"	**3.03**	6"		6	3
8522	1/2"	**3.03**	6"	1/4"	6	2¾
8524	9/16"	**3.38**	6"	7/16"	6	4
8526	5/8"	**3.71**	6"		6	5
8528	11/16"	**4.22**	6"		6	5¾
8530	3/4"	**4.73**	6"		6	6½
8532	7/8"	**5.73**	6"		6	9
8534	1"	**8.10**	6"	1/2"	1	11
8536	1⅛"	**9.79**	6"		1	12
8538	1¼"	**11.81**	10"		1	29
8540	1⅜"	**13.16**	10"		1	36
8542	1½"	**14.51**	10"		1	43½

EXTRA LENGTH CARBIDE DRILLS

Most diameters available on special order from factory in overall lengths of 12" and 18". One week delivery notice required.

FORGED TAPER-SHANK DRILLS FOR POWER HAMMERS (T/S)

WITH No. 20 RAWLDRILL TAPER

6" Length Overall Cat. No.	List Price per Doz.	Diameter	12" Length Overall Cat. No.	List Price per Doz.
8300	**$15.00**	3/8"		
8302	**15.60**	*7/16"		
8306	**17.40**	1/2"	8304	**$19.80**
8310	**19.80**	*9/16"	8308	**19.80**
8312	**19.80**	5/8"	8314	**24.00**
8316	**22.80**	*11/16"		
8320	**22.80**	3/4"	8322	**26.40**
8324	**25.20**	*13/16"		
8326	**25.20**	7/8"	8328	**30.00**

WITH No. ⅝ RAWLDRILL TAPER

8200	**$22.80**	3/8"		
8204	**23.40**	*7/16"	8206	**$30.00**
8208	**26.40**	1/2"	8210	**30.00**
8212	**30.00**	*9/16"		
8214	**30.00**	5/8"	8216	**36.00**
8218	**30.00**	*11/16*		
8222	**30.00**	3/4"	8224	**36.00**
8226	**30.00**	*13/16"		
8228	**30.00**	7/8"	8230	**36.00**
8232	**30.00**	1"	8234	**36.00**
8236	**33.60**	1-1/8"	8238	**37.80**
8240	**44.40**	1-1/4"	8242	**49.20**
		1-3/8"	8244	**52.80**
		*1-1/2"	8246	**60.00**
		*1-5/8"	8248	**72.00**

*These diameters available on special order from factory with one week's notice for delivery. 18" and 24" lengths also available.

FORGED DRILLS FOR HAND DRILLING (S/T)

Cat. No.	Diam. & Length	List Price per Doz.	Cat. No.	Diam. & Length	List Price per Doz.
8400	3/8x 9"	**$20.40**	8414	⅞x12"	**$26.40**
8402	7/16x10"	**20.40**	8416	1. x12"	**27.00**
8404	1/2x10"	**20.40**	8420	*1⅛x12"	**36.00**
8406	*9/16x12"	**20.40**	8422	*1¼x12"	**45.00**
8408	5/8x12"	**20.40**	8424	*1⅜x12"	**60.00**
8410	*11/16x12"	**24.00**	8426	*1½x12"	**75.00**
8412	3/4x12"	**24.00**	8428	*1⅝x12"	**90.00**

*These sizes available on special order from factory with one week's notice for delivery. 18" and 24" lengths also available.

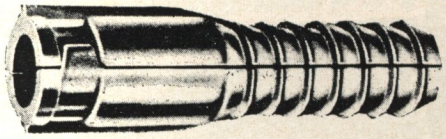
RAWL SPIRAL CARBIDE DRILL KITS

Cat. No.		Contents							List Price
8591	Kit No. 1		¼"	5/16"	⅜"	½"			**$9.65**
8592	Kit No. 2	3/16"	¼"	5/16"	⅜"	½"	⅝"		**15.38**
8593	Kit No. 3		¼"	5/16"	⅜"	½"	⅝"	¾"	**18.08**

Each kit complete with tool kit roll.

THE RAWLPLUG COMPANY, INC.

RAWL LAG SHIELDS



LAG SCREW EXPANSION SHIELDS

The Rawl Lag Screw Shield is a completely rustproof precision-cast lag shield made of durable alloy.

Ideal for all masonry fastening, especially where problem masonry is encountered.

Horizontal fins prevent shield from turning in hole.

Tapered outside rings have tremendous biting power.

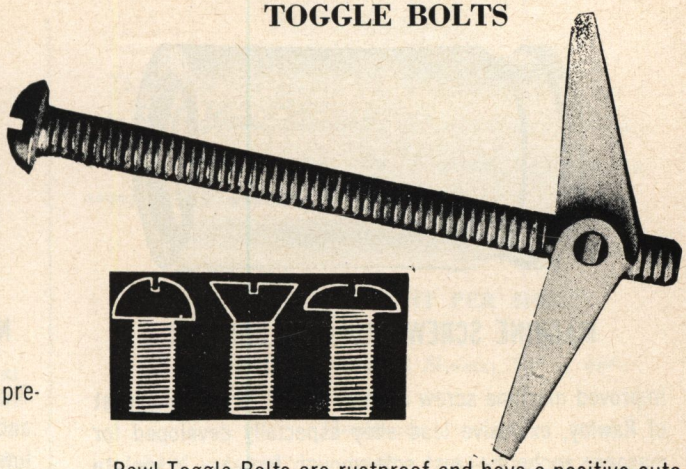
SHORT STYLE

Cat. No.	Size	List Price per 100	Rawl-drill Diam.	Lgth. of Short	Pkd. in Boxes of	Std. Pack	Wgt. lbs. per 100
S105	1/4"	**$15.00**	½"	1"	50	500	3½
S110	5/16"	**18.00**	½"	1¼"	50	500	3½
S115	3/8"	**25.00**	⅝"	1¾"	50	500	7
S120	1/2"	**38.00**	¾"	2"	50	500	12
S125	5/8"	**45.00**	⅞"	2"	25	250	13
S130	3/4"	**65.00**	1"	2"	25	250	16½

LONG STYLE

Cat. No.	Size	List Price per 100	Rawl-drill Diam.	Lgth. of Long	Pkd. in Boxes of	Std. Pack	Wgt. lbs. per 100
L105	1/4"	**$15.00**	½"	1½"	50	500	5
L110	5/16"	**18.00**	½"	1¾"	50	500	5
L115	3/8"	**25.00**	⅝"	2½"	50	500	10
L120	1/2"	**38.00**	¾"	3"	50	500	17
L125	5/8"	**45.00**	⅞"	3½"	25	250	22½
L130	3/4"	**65.00**	1"	3½"	25	250	29

RAWL SPRING-WINGS AUTOMATIC SPRING ACTION TOGGLE BOLTS



Rawl Toggle Bolts are rustproof and have a positive automatic spring action for easy installation in Hollow Walls, Pressed Board Walls, Tile, Sheet Metal, etc.

To order, add prefix letter to catalog number to indicate head style desired: R for ROUND HEAD; F for FLAT HEAD; M for MUSHROOM HEAD.

Cat. No.	Diam: & Lgth. Bolt	List Price per 100	Rawl-drill Diam.	Pkd. in Boxes of	Std. Pack.	Wgt. lbs. per 100
602	■1/8x2"	**$8.00**				1¼
603	3"	**9.00**	⅜"	50	500	1½
604	4"	**10.00**				2
612	3/16x2"	**8.50**				3
613	3"	**9.50**				3¾
614	4"	**10.00**	½"	50	500	4½
615	5"	**12.00**				5¼
616	6"	**12.50**				6
623	1/4x3"	**10.50**				6
624	4"	**11.00**				7
625	5"	**14.00**	⅝"	50	500	8½
626	6"	**15.50**				9½
633	5/16x3"	**16.00**				11
634	4"	**17.00**				13
635	5"	**21.50**	⅞"	25	250	15
636	6"	**23.00**				17
643	3/8x3"	**21.00**				14
644	4"	**23.00**				17
645	5"	**28.50**	⅞"	25	250	20
646	6"	**30.00**				22

■1/8" size also available with Mushroom Head.

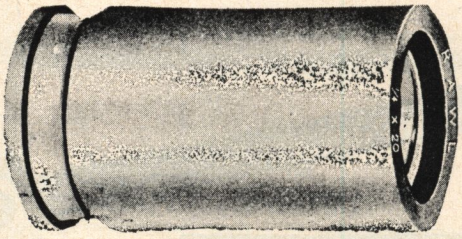
TOGGLE WINGS ONLY

Cat. No.	600	610	620	630	640
Diam.	1/8"	3/16"	1/4"	5/16"	3/8"
List Price per 100	**$7.00**	**$7.50**	**$8.50**	**$12.00**	**$16.00**

BOLTS ONLY also available in all sizes.

THE RAWLPLUG COMPANY, INC.

RAWL CALKINS



MACHINE SCREW CAULKING ANCHORS

Improved machine screw anchor. Sleeve is precision-cast of Rawloy, exclusive lead alloy especially developed for masonry anchors — just soft enough for easy, complete caulking and hard enough for tremendous holding power.

FREE caulking tool included in every box.

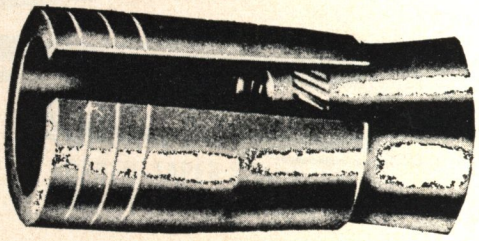
Cat. No.	Size	List Price per 100	Rawl-drill Diam.	Mini-mum Depth	Pkd. in Boxes of	Std. Pack.	Ship. Wgt. per 100
9200	6x32"	**$6.00**	5/16"	½"	100	500	1¼
9205	8x32"	**6.50**	5/16"	½"	100	500	1½
9210	10x24"	**7.50**	⅜"	⅝"	100	1000	2
9215	12x24"	**9.50**	½"	⅞"	100	500	4¼
9220	¼x20"	**11.00**	½"	⅞"	100	1000	4½
9225	5/16x18"	**15.00**	⅝"	1"	50	250	8
9230	⅜x16"	**20.00**	¾"	1¼"	50	250	14
9240	½x13"	**26.00**	⅞"	1½"	50	250	19
9245	⅝x11"	**50.00**	1"	2"	50	250	39



EXTRA RAWL CALK-IN TOOLS

Cat. No.	Size	List Price	Cat. No.	Size	List Price	Cat. No.	Size	List Price
9201	6x32"	**$.22**	9216	12x24"	**$.24**	9231	⅜x16"	**$.40**
9206	8x32"	**.22**	9221	¼x20"	**.25**	9241	½x13"	**.50**
9211	10x24"	**.23**	9226	5/16x18"	**.33**	9246	⅝x11"	**1.20**

RAWL HAMMER-SETS

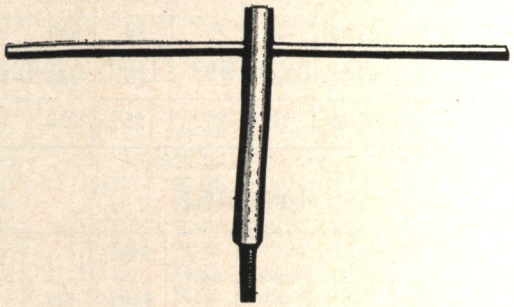


NON-CAULKING ANCHORS FOR MACHINE BOLTS

Shallower hole required than all other machine bolt anchors. Excellent for heavy holding requirements in hollow material — cement and cinder block, hollow tile, etc. Can be used at any depth in a hole, thus can be set beneath plaster or other soft surface materials.

Cat. No.	Ham-mer-Set Size	List Price per 100	Rawl-drill Diam.	Min. Depth Hole	Pkd. in Boxes of	Std. Pack.	Wt. lbs. per 100
9310	3/16"	**$15.00**	⅜"	⅞"	100	500	1¾
9320	1/4"	**16.00**	⅜"	⅞"	100	500	1¾
9330	5/16"	**18.00**	⅝"*	1⅜"	100	500	5½
9340	3/8"	**22.00**	⅝"*	1⅜"	100	500	5½
9350	1/2"	**36.00**	¾"†	1¾"	50	250	8¾
9360	5/8"	**48.00**	1"	2⅛"	50	250	19

*In extra hard material 11/16" drill is recommended.
†In extra hard material 13/16" drill is recommended.



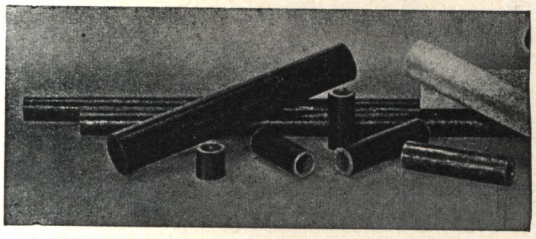
HAMMER SET PRE-EXPANDERS

For installation where work or fixture is not flush. (Pipe hanging, for instance.)

Cat. No.	Size	Net Price	Cat. No.	Size	Net Price
9311	3/16"	**$1.65**	9341	3/8"	**$2.50**
9321	1/4"	**1.65**	9351	1/2"	**4.00**
9331	5/16"	**2.50**	9361	5/8"	**5.00**

INSULATING MATERIAL

MICA TUBING



Mica tubing is extensively used for grid rheostat rods and for this purpose it is ideal because it is not only an excellent insulator that withstands extremely high temperatures, but it is not brittle and will, therefore, not crack when subjected to heavy vibration, shocks, or temperature changes. It also has certain advantages as sleeves for small commutators, brush holder studs, bushings, etc.

LIST PRICES PER FOOT

Standard Lengths, 1′ to 3′.

ALL-MICA

Inside Dia. Inch	Thickness of Wall 1/32″	1/16″	3/32″	1/8″	5/32″	1/4″
1/8						
3/16						
1/4						
5/16						
3/8						
7/16						
1/2						
9/16						
5/8						
11/16						
3/4						
13/16						
7/8						
15/16						
1						
1 1/16						
1 1/8						
1 3/16						
1 1/4						
1 5/16						
1 3/8						
1 7/16						
1 1/2						

Prices and Data On Request

FISH PAPER

Known as Tarpon Paper

FIBROID, PEERLESS INSULATION, Etc.

Made of cotton rag stock by similar process used in manufacture of vulcanized fibre.

Standard Sheet, 46″ x 72″.

Thickness	Size .004″ .005″ Ap. Wgt. per Sheet	List Prices Thickness	Ap. Wgt. per Sheet
.004″	.5 lb.	.017″	2.5 ″
.005″	.6 ″	.020″	3. ″
.007″	.7 ″	.025″	3.5 ″
.008″	.8 ″	.028″	3.7 ″
.009″	.9 ″	.032″—1/32″	4. ″
.010″	1.25 ″	.040″	6. ″
.012″	2. ″	.056″	7. ″
.015—1/64″	2. ″	.062″—1/16″	8. ″
		.125″—1/8″	16. ″

PRESSBOARD

There are two grades, No. 1 differing from No. 2 only in toughness, permitting the board to be sharply bent without cracking. No. 2 grade is of an unusually high quality.

APPROXIMATE WEIGHT PER SHEET

No. 1 Pressboard—Standard Sheets: 30″ x 40″.

Thickness				
.010″	.015″	.020″	.025″	0.30″
.5 lb.	.75 lb.	1.0 lb.	1.2 lb.	1.6 lb.
.035″	.040″	.045″	1/16″	1/8″
2.0 lb.	2.2 lb.	2.5 lb.	3.5 lb.	6.0 lb.

No. 2 Pressboard—Standard Sheets: 24″ x 32″

Thickness				
0.10″	.015″	.020″	.025″	.030′
.45 lb.	.55 lb.	.80 lb.	1.0 lb.	1.2 lb.
.035″	.040″	.045″	1/16″	1/8″
1.5 lb.	1.75 lb.	1.9 lb.	2.3 lb.	4.3 lb.

EBONITE SHEETS & RODS

Ebonite Sheets 20″ x 48″ Thickness	Weight, lbs. per sheet	Ebonite Rods 24″
1/16	2½	18 rods 1 lb.
1/8	5	13 ″ 1 ″
5/32	5¾	8 ″ 1 ″
3/16	8	7 ″ 1 ″
1/4	10½	5 ″ 1 ″
5/16	12¾	4 ″ 1 ″
3/8	16	3 ″ 1 ″
7/16	18½	6 oz. per rod.
1/2	21	7 ″ ″ ″
9/16	23	8½ ″ ″ ″
5/8	26	9½ ″ ″ ″
3/4	30	11½ ″ ″ ″
7/8	35	13 ″ ″ ″
1	40	

INSULATING MATERIAL

VARNISHED CAMBRIC

Thickness	Min. voltage	Max. voltage	Avge. voltage	Min. voltage	Max. voltage	Avge. voltage
.004"	1240	1455	1400	1360	1600	1550
.005"	990	1165	1120	1100	1300	1250
.005"	1110	1460	1370	1240	1635	1530
.006"	1255	1385	1320	1430	1575	1500
.006"	1315	1645	1475	1500	1775	1680
.007"	1170	1540	1385	1355	1785	1605
.007"	1145	1635	1495	1325	1895	1730
.008"	1325	1450	1400	1560	1710	1650
.009"	1330	1460	1390	1570	1720	1640
.010"	1310	1495	1370	1570	1685	1640
.012"	1010	1560	1320	1215	1870	1580
.015"	1125	1350	1210	1370	1645	1475

VARNISHED CAMBRIC TAPES

Approximate Weight Lbs. Per Gross Yard

THICKNESSES

Widths	.005" lbs.	.007" lbs.	.010" lbs.	.012" lbs.
½"	.6066	.8412	1.1168	1.3680
¾"	.9020	1.2510	1.6612	2.042
1"	1.1976	1.6644	2.205	2.70
1¼"	1.4930	2.076	2.75	3.366
1½"	1.7882	2.469	3.294	4.0316

SLOT INSULATION

Slot insulation is varnished cambric and fibrous paper joined with an insulating cement—one piece construction.

Average dielectric value 500 to 700 volts per ml.

Thickness	Price per Sheet Approx. 36" x 36"
.012"—.013"	Prices and Data on Request.
.014"—.015"	
.017"—.018"	
.019"—.020"	
.022"—.023"	
.027"—.028"	

VULCANIZED SHEET FIBRE

Standard Sheets, 44"x72"

Decimal	Fraction	Approx. Weight, per sheet	Price, per Lb.
.005"		8/10	Prices and Data on Request
.010"		1-1/2	
.015"		2-4/10	
.016"	1/64"	2-1/2	
.020"		3-1/4	
.032"	1/32"	5	
.047"	3/64"	7-1/2	
.063"	1/16"	10	
.095"	3/32"	15	
.125"	1/8"	20	
.187"	3/16"	30	
.250"	1/4"	40	
.315"	5/16"	50	
.375"	3/8"	60	
.433"	7/16"	70	
.500"	1/2"	80	
.562"	9/16"	90	
.630"	5/8"	100	
.748"	3/4"	120	
.875"	7/8"	140	
1.000"	1"	160	

Colors: Red, Black and Natural (Gray-White)

FIBRE TUBING

PRICE LIST OF FIBRE TUBING BY THE FOOT

Furnished in Approx. 2 to 3 Foot Lengths

Thickness of Wall in Inches

Rectangular Tubes take double the list price of round.

I.D.	1/16	1/8	3/16	1/4
1/8				
3/16				
1/4				
5/16				
3/8				
7/16				
1/2				
9/16				
5/8				
11/16				
3/4				
7/8				
15/16				
1				

Prices and Data on Request

FIBRE RODS

Furnished in Approx. 5 to 6 Foot Lengths

Diam. Inch	Ft. per lb.	9 ft. or less	10 to 24 ft.	25 to 49 ft.	50 to 99 ft
3/32	241				
1/8	136				
3/16	60				
1/4	34				
5/16	22				
3/8	15				
7/16	11				
1/2	8.5				
9/16	6.7				
5/8	5.4				
11/16	4.5				
3/4	3.8				
13/16	3.2				
7/8	2.8				
15/16	2.4				
1	2.1				

Prices and Data on Request

NO. 1 INDIA MICA PLATE

(FOR MOULDING)

No. 1 plate should not be used between commutator segments.

Standard Sheets, 18 x 36"

Thickness	Pounds, per Sheet (Approved)	Average Puncture Voltage	List Price per Pound
.010"	.503	9500	Prices and Data on Request
.015"	.748	14300	
.020"	.946	19000	
.025"	1.21	23800	
.030"	1.53	26800	
.032"	1.64	29700	
.035"	1.68	33300	
.040"	2.17	38100	
.045"	2 25	42900	
.047"	2.42	44600	
.050"	2.64	47700	
.055"	2.92	51600	
.060"	3 19	55600	
.063"	3.32	59600	
.065"	3 44	66500	
.070"	3.75	76400	
.095"	4.92	89300	
.125"	6.22	119200	

FOR COMMUTATOR SEGMENTS

Standard Sheets, 18 x 36"

Thickness	Pounds, per Sheet (Approved)	Average Puncture Voltage	List Price per Pound
.010"	.567	9550	Prices and Data on Request
.015"	.85	14300	
.020"	1.13	19000	
.025"	1.41	23800	
.030"	1.70	28600	
.032"	1.76	29800	
.035"	1.98	33400	
.040"	2.27	38200	
.045"	2.55	42900	
.047"	2 65	44600	
.050"	2.83	47700	
.055"	3.1	51700	
.060"	3.4	57300	
.063"	3.54	59600	
.065"	4.2	62500	
.070"	4.8	78400	
.095"	5.3	89400	
.125"	7.05	119300	

No. 7 FLEXIBLE MICA PLATE

(FOR ARMATURE SLOTS, ETC.)

Standard Sheets, 36" x 36"

Thickness	Sheet (Approved) Pounds, per	Average Voltage Puncture	per Pound List Price
.005"	.575	2900	Prices and Data on Request
.010"	.967	5800	
.015"	1.48	8200	
.020"	1.84	11700	
.025"	2.24	14700	
.030"	2.64	17600	
.032"	3.04	18300	
.063"	6.03	36700	
.125"	12.	73500	

MICA RINGS & SEGMENTS

Molds and dies for practically every style of commutator rings and segments are available for the immediate production of these parts. Special forms made to order on short notice.

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LAMPS and LIGHTING FIXTURES • FITTINGS

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LAMPS and LIGHTING FIXTURES • FITTINGS
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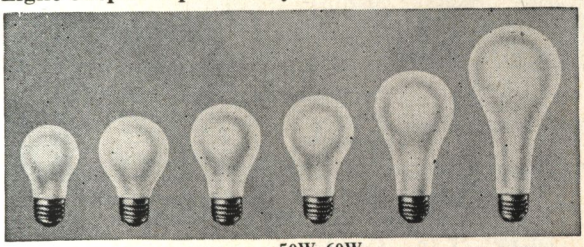
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GENERAL ELECTRIC LAMPS

★ 120 Volts, except where noted.

GENERAL ELECTRIC INSIDE FROSTED LAMPS

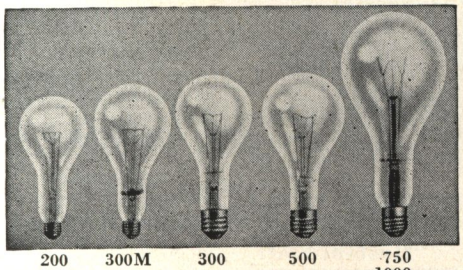
For most general lighting purposes. Inside frosting diffuses the light and helps eliminate shadows and glare. Light output is practically the same as for clear lamps. Outside surface is smooth and easily cleaned.



15W 25W 40W 50W, 60W 75W 100W 150W

Watts	Bulb	Base	Max. Over-all Lgth. Inches	Lamp Ordering Abbrev.	Std. Pkg. Qty.	List Price
15	A-15	Med.	3 1/2	15A15	120	$0.21
25	A-19	Med.	3 15/16	25A	120	.21
40	A-19	Med.	4 1/4	40A	120	.21
50	A-19	Med.	4 7/16	50A	120	.21
60	A-19	Med.	4 7/16	60A	120	.21
75	A-19	Med.	4 7/16	75A	120	.21
100	A-21	Med.	5 5/16	100A	120	.23

G-E CLEAR LAMPS

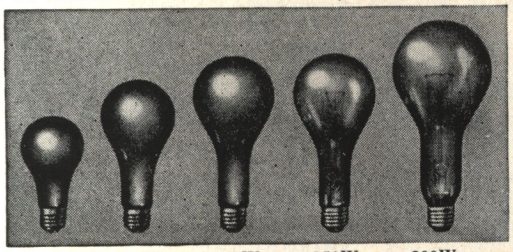


200 300M 300 500 750 1000 1500

Used in enclosed diffusing equipment or shielded reflectors which protect the eyes from glare.

150	A-23	Med.	6 5/16	150A/CL	60	$0.29
200	A-25	Med.	6 15/16	200A/CL	60	.38
300	PS-30	Med.	8 1/16	300M	60	.48
300	PS-35	Mog.	9 3/8	300	24	.67
500	PS-40	Mog.	9 3/4	500	24	1.00
750	PS-52	Mog.	13 1/16	750	6	2.80
1000	PS-52	Mog.	13 1/16	1000	6	3.00
1500	PS-52	Mog.	13 1/16	1500	6	4.50

G-E DAYLIGHT LAMPS (115-125 Volts)

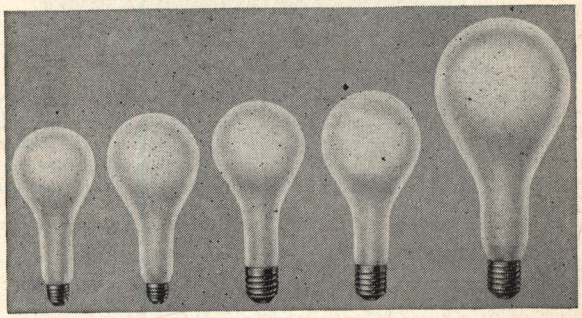


60W 100W 150W 150W 200W

Produce light approximating daylight. Used where color discernment is important.

25	A-19	Med.	3 15/16	25A/D	120	$0.37
60	A-19 I.F.	Med.	4 7/16	60A/D	120	.35
100	A-23 I.F.	Med.	6 1/16	100A/D	120	.47
150	PS-25	Med.	6 15/16	150/D	60	.60
150	PS-25	Med.	6 15/16	150/DCL	60	.60
200	PS-30	Med.	8 1/16	200/D	60	.85

★ Also Available in 115 or 125 volts at same prices.



200W 300W (Med.) 300W (Mog.) 500W 750W 1000W

Watts	Bulb	Base	Max. Over-all Lgth. Inches	Lamp Ordering Abbrev.	Std. Pkg. Qty.	List Price
150	A-23	Med.	6 5/16	150A	60	$0.27
200	A-25	Med.	6 15/16	200A	60	.38
300	PS-30	Med.	8 1/16	300M/IF	60	.48
300	PS-35	Mog.	9 3/8	300/IF	24	.67
500	PS-40	Mog.	9 3/4	500/IF	24	1.05
750	PS-52	Mog.	13 1/16	750/IF	6	2.95
1000	PS-52	Mog.	13 1/16	1000/IF	6	3.15
1500	PS-52	Mog.	13 1/16	1500/IF	6	4.65

DISCOUNT SCHEDULE

TO PURCHASERS UNDER FORM E CONTRACT

BASIS (Net Value of Purchases)	DISCOUNT	
Less than $600	Same as to purchasers without contract	
	$15 or More List Value or Less than $15 List Value Including a Standard Package	Broken Package Quantities of Less than $15 List Value
$ 600	31%	26%
1,500	32%	27%
3,500	33%	28%
7,500	34%	29%
15,000	35%	30%
20,000	36%	31%
35,000	37%	32%
65,000	38%	33%
100,000	39%	34%
150,000	40%	35%
200,000	40.5%	35.5%

In addition, 2% of list is allowed on orders of $300.00 list value, or ten standard packages shipped at one time to one place.

TO PURCHASERS WITHOUT CONTRACT

Minimum List Value for Immediate Delivery to One Point:	Discount
Less than $5.00	0%
$ 5.00	20%
$15.00 (Less than a Standard Package)	25%
An order including at least one Standard Package	30%

A standard package of large lamps is defined as a package, as packed by the manufacturer, of that "Standard Package Quantity" designated for each lamp in the manufacturer's price schedule, and the lamps in such a standard package may not be of different specifications.

BULB DESIGNATIONS

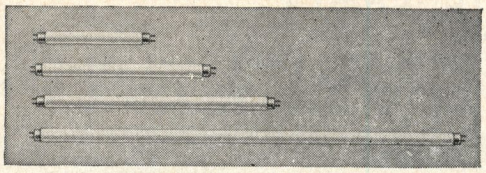
The letter in a bulb designation indicates its shape and the figure indicates its approximate diameter in eighths of an inch. Thus, a G-25 is a globular bulb approximately 3 1/8 inches in diameter.

BULB SHAPES

C–Cone
S–Straight side
P–Pear shape
F–Flame shape
G–Globe shape
T–Tubular
R–Reflector shape
PS–Pear straight neck
A–Standard line
PAR–Parabolic

GENERAL ELECTRIC LAMPS

G-E FLUORESCENT LAMPS



F4T5, F6T5, F8T5, F13T5

Lower wattage fluorescent lamps, 4 to 25 watts, are used for showcases, niches, bed lamps, etc., where space is small or where low amounts of light are desired. Higher wattage lamps, 30 to 90 watts are used in homes, stores, offices, industrial plants and other applications of general lighting.

Nom. Lamp Watts	Bulb	Color	Lamp Ordering Abbrev.	Std. Pkg. Qty.	List Price
		(For Use With Starters) Miniature Bipin Base			
4	6″—T-5	Cool White	F4T5/CW	24	$1.30
6	9″—T-5	Cool White	F6T5/CW	24	1.30
	(⅝″ diam.)	White	F6T5/W	24	1.35
8	12″—T-5	Cool White	F8T5/CW	24	1.30
	(⅝″ diam.)	White	F8T5/W	24	1.35
13	21″—T-5	Cool White	F13T5/CW	24	1.45
	(⅝″ diam.)				
		Medium Bipin Base			
14	15″—T-12	Cool White	F14T12/CW	24	1.00
	(1½″ diam.)	Warm White	F14T12/WW	24	1.05
		White	F14T12/W	24	1.05
		Daylight	F14T12/D	24	1.05
15	18″—T-8	Cool White	F15T8/CW	24	1.00
	(1″ diam.)	De Luxe Cool Wh.	F15T8/CWX	24	1.05
		Warm White	F15T8/WW	24	1.05
		De Luxe Warm Wh.	F15T8/WWX	24	1.05
		White	F15T8/W	24	1.05
		Daylight	F15T8/D	24	1.05
		Soft White①	F15T8/SW	24	1.35
15	18″—T-12	Cool White	F15T12/CW	24	1.00
	(1½″ diam.)	De Luxe Cool Wh.	F15T12/CWX	24	1.05
		Warm White	F15T12/WW	24	1.05
		De Luxe Warm Wh.	F15T12/WWX	24	1.05
		White	F15T12/W	24	1.05
		Daylight	F15T12/D	24	1.05
20	24″—T-12	Cool White	F20T12/CW	24	1.00
	(1½″ diam.)	De Luxe Cool Wh.	F20T12/CWX	24	1.05
		Warm White	F20T12/WW	24	1.05
		De Luxe Warm Wh.	F20T12/WWX	24	1.05
		White	F20T12/W	24	1.05
		Daylight	F20T12/D	24	1.05
		Soft White①	F20T12/SW	24	1.35
25	33″—T-12	Cool White	F25T12/CW/33	24	1.40
	(1½″ diam.)	De Luxe Warm Wh.	F25T12/WWX/33	24	1.45
		Daylight	F25T12/D/33	24	1.45
30	36″—T-8	Cool White	F30T8/CW	24	1.20
	(1″ diam.)	De Luxe Cool Wh.	F30T8/CWX	24	1.25
		Warm White	F30T8/WW	24	1.25
		De Luxe Warm Wh.	F30T8/WWX	24	1.25
		White	F30T8/W	24	1.25
		Daylight	F30T8/D	24	1.25
		Soft White①	F30T8/SW	24	1.55
40	48″—T-12	Cool White	F40T12/CW	24	1.20
	(1½″ diam.)	De Luxe Cool Wh.	F40T12/CWX	24	1.25
		Warm White	F40T12/WW	24	1.25
		De Luxe Warm Wh.	F40T12/WWX	24	1.25
		White	F40T12/W	24	1.25
		Daylight	F40T12/D	24	1.25
		Soft White①	F40T12/SW	24	1.55
		Mogul Bipin Base			
90	60″—T-17	Cool White	F90T17/CW	12	2.90
	(2⅛″ diam.)	Daylight	F90T17/D	12	3.00
		White	F90T17/W	12	3.00



F40T12, F90T17

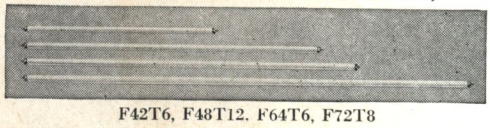
		RAPID START (No Starters Used) Medium Bipin Base			
40	48″—T-12	Cool White	F40T12/CW/RS	24	$1.30
	(1½″ diam.)	De Luxe Cool Wh.	F40T12/CWX/RS	24	1.35
		Warm White	F40T12/WW/RS	24	1.35
		DeLuxeWarmWh.	F40T12/WWX/RS	24	1.35
		White	F40T12/W/RS	24	1.35
		Daylight	F40T12/D/RS	24	1.35
		Soft White①	F40T12/SW/RS	24	1.65
		HIGH OUTPUT (No Starters Used)* Recessed Double Contact Base			
60	48″—T-12	Cool White	F48T12/CW/HO	24	2.45
		Warm White	F48T12/WW/HO	24	2.50
85	72″—T-12	Cool White	F72T12/CW/HO	12	3.75
		Warm White	F72T12/WW/HO	12	3.85
105	96″—T-12	Cool White	F96T12/CW/HO	12	3.85
		Warm White	F96T12/WW/HO	12	3.95
		De Luxe Cool Wh.	F96T12/CWX/HO	12	3.95
		De Luxe Warm Wh.	F96T12/WWX/HO	12	3.95
		Mogul Bipin Base			
100	72″—T-12	Cool Wh. Street Lt.	F100T12/CW/HO	12	4.50
		POWER GROOVE (No Starters Used)			
107	48″—PG-17	Cool White	F48PG17/CW	12	4.95
155	72″—PG-17	Cool White	F72PG17/CW	8	6.25
200	96″—PG-17	Cool White	F96PG17/CW	8	6.50

*"H. O." replaces "R. S." used previously in ordering abbreviations. Lamps are unchanged.

		INSTANT START (No Starters Used)			
40	48″—T-12	Cool Wh. (Med. Bip. Base)	F40T12/CW/IS	24	1.50
40	60″—T-17	Cool Wh. (Mog. Bipin Base)	F40T17/CW/IS	12	3.40

G-E SLIMLINE FLUORESCENT LAMPS

(Instant Start — No Starters Used)



F42T6, F48T12, F64T6, F72T8

Provide long slim lines of light. Are appreciated for their decorative value as well as for their lighting efficiency.

		Single Pin Base			
17.5-32.5	42″—T-6	Cool White	F42T6/CW	24	$2.50
	(¾″ diam.)	De Luxe Cool Wh.	F42T6/CWX	24	2.60
		Warm White	F46T6/WW	24	2.60
		De Luxe Warm Wh.	F46T6/WWX	24	2.60
25.5-48	64″—T-6	Cool White	F64T6/CW	24	2.70
	(¾″ diam.)	De Luxe Cool Wh.	F64T6/CWX	24	2.80
		Warm White	F64T6/WW	24	2.80
		De Luxe Warm Wh.	F64T6/WWX	24	2.80
24.5-48.5	72″—T-8	Cool White	F72T8/CW	24	2.80
	(1″ diam.)	De Luxe Cool Wh.	F72T8/CWX	24	2.90
		Warm White	F72T8/WW	24	2.90
		De Luxe Warm Wh.	F72T8/WWX	24	2.90
32-65	96″—T-8	Cool White	F96T8/CW	24	3.00
	(1″ diam.)	De Luxe Cool Wh.	F96T8/CWX	24	3.10
		Warm White	F96T8/WW	24	3.10
		De Luxe Warm Wh.	F96T8/WWX	24	3.10
38	48″—T-12	Cool White	F48T12/CW	24	1.90
	(1½″ diam.)	Warm White	F48T12/WW	24	1.95
55	72″—T-12	Cool White	F72T12/CW	12	3.20
	(1½″ diam.)	Warm White	F72T12/WW	12	3.30
74	96″—T-12	Cool White	F96T12/CW	12	3.30
	(1½″ diam.)	De Luxe Cool Wh.	F96T12/CWX	12	3.40
		Warm White	F96T12/WW	12	3.40
		De Luxe Warm Wh.	F96T12/WWX	12	3.40

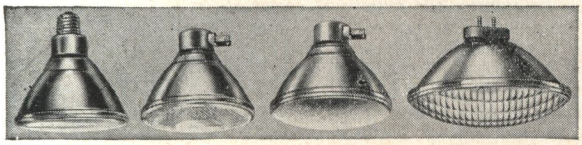
① Available also in blue, green, pink, gold, or red at same price.

All G-E Fluorescent lamps should be used only with auxiliary equipment designed to produce proper electrical values. Unless otherwise noted, ratings apply to operation in a-c circuits. Lamps may be burned in any position.

GENERAL ELECTRIC LAMPS

★ 120 Volts, except where noted.

G-E PROJECTOR LAMPS



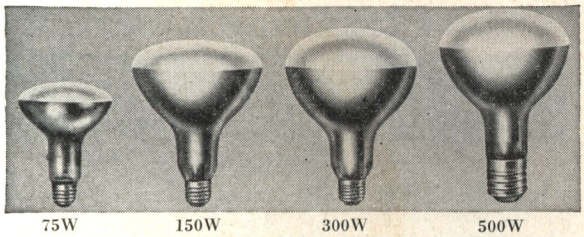
150W PAR-38 | 150W PAR-38 | 200W PAR-46 | 300W PAR-56

Projector Spot and Flood Lamps are made of hard glass, and may be used indoors, or outdoors.

Watts	Description	Base	Lamp Ordering Abbrev.	Std. Pkg. Qty.	List Price
75	Spot	Med. Skt.	75/PAR/SP	12	$2.20
75	Flood	Med. Skt.	75PAR/FL	12	2.20
†150	Spot	Med. Skt.	150PAR/SP	12	2.20
†150	Flood ①	Med. Skt.	150PAR/FL	12	2.20
*150	Compact Sp.	Side Prong	150PAR/3SP	12	2.50
*150	Compact Fl.	Side Prong	150PAR/3FL	12	2.50
*200	Narrow Sp.	Side Prong	200PAR46/3NSP	8	4.50
*200	Med. FL. Lens Cover	Side Prong	200PAR46/3MFL	8	4.50
*300	Narrow Sp.	Mog. End. Pr.	300PAR56/NSP	8	5.20
300	Med. FL. Lens Cover	Mog. End. Pr.	300PAR56/MFL	8	5.20
300	Wide FL. Lens Cover	Mog. End. Pr.	300PAR56/WFL	8	5.20

① Blue, Blue-White, Green, Pink, Red, Yellow — $2.95

G-E REFLECTOR LAMPS



75W | 150W | 300W | 500W

The Reflector Spot and Flood lamps provide, respectively, a concentrated beam for feature store and window displays, or a spread beam for floodlighting interiors and operations. Not for outdoor use.

75	R-30 Light I.F.	Med.	75R30/SP	60	$1.25
75	R-30 I.F.	Med.	75R30/FL	60	1.25
150	R-40 Light I.F.‡	Med.	150R/SP	24	1.25
150	R-40 I.F.‡②	Med.	150R/FL	24	1.25
†300	R-40 Light I.F.‡	Med.	300R/SP	24	1.65
†300	R-40 I.F.‡	Med.	300R/FL	24	1.65
500	R-52 Light I.F.‡	Mog.	500R52	6	4.00
750	R-52 Light I.F.‡	Mog.	750R52	6	4.90
1000	RB-52 Light I.F.*‡	Mog.	1M/RB52	6	5.90

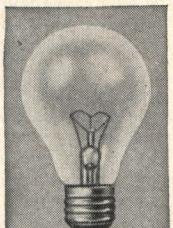
② Available also in Blue-White, Green, Yellow, Pink, Red, Blue $2.25

† Should be burned only in porcelain sockets.

‡ May not give satisfactory performance if any accessory lighting equipment is attached to, or touches the glass bulb. Should be shielded against moisture falling on bulb.

* Heat resistant glass bulb.

G-E TRAFFIC SIGNAL LAMPS



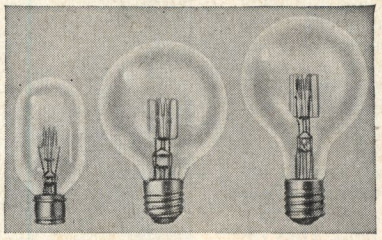
60 A-21 67 A-21

These lamps have a short light center length, and produce enough light for a signal indication of requisite brightness. In the interest of public safety it is strongly recommended that no lamp of lower wattage be used.

Watts	Bulb and Finish	Base	Lamp Ordering Abbrev.	Std. Pkg. Qty.	List Price
60	A-21 Clear	Med. Screw	60A21/TS	120	$0.25
64	A-21 Clear	Med. Screw	64A21/TS	120	.29

★ Also available in 115 or 125 volts at same prices.

G-E FLOODLIGHT AND SPOTLIGHT LAMPS



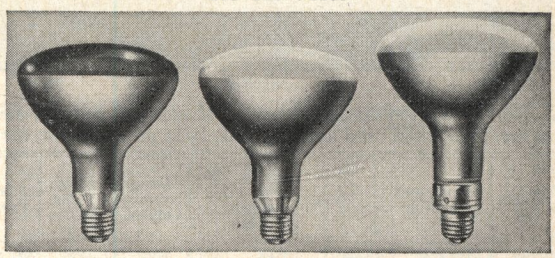
250 G-30 | 500G-40 | 1000 G-40

G-E Floodlight and Spotlight lamps are made with the filament concentrated into a small space and accurately positioned with respect to the base. They may be burned in any position from vertically base down to horizontal.

Watts	Bulb and Finish	Base	Lamp Ordering Abbrev.	Light Center Length, Inches	Std. Pkg. Qty.	List Price
FLOODLIGHT LAMPS						
250	G-30 Cl.	Med.	250G/FL	3	60	$1.80
400	G-40 Cl.	Med.	400G/FL	3	60	1.90
500	G-40 Cl.	Mog.	500G/FL	4¼	24	3.10
1000	G-40 Cl.	Mog.	1M/G40FL	5¼	24	8.50
SPOTLIGHT LAMPS						
100	A-21 Cl.	Med.	100A21SP	3	120	1.50
250	G-30 Cl.	Med.	250G/SP	3	60	1.80
400	G-30 Cl.	Med.	400G/SP	3	60	1.90
500	G-40 Cl.	Mog.	500G/SP	4¼	24	3.10
1000	G-40 Cl.	Mog.	1M/G40SP4¼	4¼	24	8.50

G-E INFRARED HEAT LAMPS

115-125 Volts



250R40/10 | 250R40/1 | 250R40/4 375R40

G-E Heat lamps provide penetrating heat that helps to relieve muscular aches and pains. Have many other uses in home and farm for quick drying and heating.

Radiation from G-E industrial infrared lamps speeds drying and surface heating processes and facilitates today's trend toward straight-line, continuous-flow production.

Watts	Bulb and Finish	Base	Lamp Ordering Abbrev.	Std. Pkg. Qty.	List Price
125	G-30 Clear	Med. Skt.	125G30	60	$0.95
250	G-30 Clear	Med. Skt.	250G30	60	1.00
250	R-40 Light I.F.	Med.	250R40/1	24	1.10
•250	R-40 Red Bowl	Med.	250R40/10	24	2.95
250	R-40 Light I.F.	Med. Skt.	250R40/4	24	1.50
375	R-40 Light I.F.	Med. Skt.	375R40	24	1.65
500	T-3 Quartz	Sleeve with app. 6″ leads	500T3	12	7.00
1000	T-3 Quartz		1000T3	12	8.50

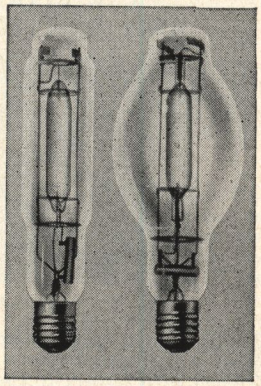
• Not subject to discount on less than standard package quantities.

GENERAL ELECTRIC LAMPS

★ 120 Volts, except where noted.

G-E MERCURY LAMPS

Higher lumens per watt efficiency give mercury lamps preference over filament-type lamps for certain lighting purposes. The yellowish-green light is emitted by an electric arc formed between two electrodes enclosed in a glass bulb. They require special transformers or regulating devices for starting and operation.

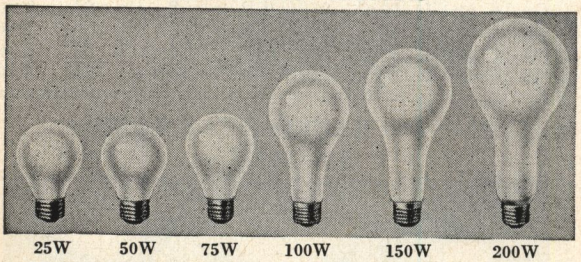


H400E1T H400E1

Approx. Lamp Watts	Bulb	Base	Lamp Number	Rated Average Life (Hrs.) ①	Std. Pkg. Qty.	List Price
②400	T-16	Mog.	H400-A1	6000	12	$14.50
400	BT-37	Mog.	H400-E1	6000	6	20.00
400	T-20	Mog.	H400-E1T	5000	12	25.00
3000	T-9½	S.C. Term.	H3000-A9	6000	1	59.00

① Rated average life under specified test conditions, with 5 burning hours per start.
② Burn within 10° of vertical base up.

G-E ROUGH SERVICE AND VIBRATION LAMPS



25W 50W 75W 100W 150W 200W

Rough Service lamps withstand shock and bumps, such as received when used as a portable light on extension cord.

Watts	Bulb and Finish	Base	Max. Over-all Length, Inches	Lamp Ordering Abbrev.	Std. Pkg. Qty.	List Price
25	A-19 I.F.	Med.	3 15/16	25A/RS	120	$0.37
50	A-19 I.F.	Med.	3 15/16	50A/RS	120	.40
75	A-21 I.F.	Med.	4 7/16	75A21/RS	120	.50
100	A-21 I.F.	Med.	5 5/16	100A/RS	120	.43
150	PS-25 I.F.	Med.	6 15/16	150/RS	60	.60
200	PS-30 I.F.	Med.	8 1/16	200PS30/23	60	.85

The Vibration lamp is designed to withstand high frequency vibration, as from high-speed machinery.

50	A-19 I.F.	Med.	3 15/16	50A/VS	120	$0.26
100	A-23 I.F.	Med.	6 1/16	100A23/28	120	.60

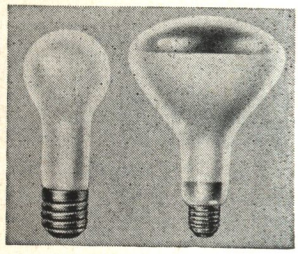
G-E HIGH VOLTAGE LAMPS (230 and 250 Volts)

25	A-19 I.F.	Med.	3 15/16	25A	120	$0.29
50	A-19 I.F.	Med.	3 15/16	50A	120	.29
100	A-21 I.F.	Med.	5 5/16	100A	120	.33
150	PS-25 I.F.	Med.	6 15/16	150PS25	60	.56
200	PS-30 Cl.	Med.	8 1/16	200	60	.56
200	PS-30 I.F.	Med.	8 1/16	200/IF	60	.56
300	PS-35 Cl.	Mog.	9 3/8	300	24	1.00
500	PS-40 Cl.	Mog.	9 3/4	500	24	1.40
750	PS-52 Cl.	Mog.	13 1/16	750	6	3.40
1000	PS-52 Cl.	Mog.	13 1/16	1000	6	3.55

★ Also available in 115 or 125 Volts at same prices.

G-E SUNLAMPS

Sunlamps are usually employed in portable-type lamps and fixtures for homes, offices and similar locations; in various types of farm units for irradiating animals and poultry and in Solaria.



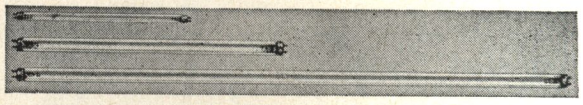
S1 RS

RS. Type RS, is in a bulb with self-contained reflector, and operates directly from 50-60 cycle, 110-125 volt A. C. current with no auxiliary ballast required.

Watts	Bulb	Finish	Base	Lamp No.	Std. Pkg. Qty.	List Price
•275	R-40	I.F. Reflector	Med.	RS①	6	$9.95
400	PS-22	I.F.	Mog.	S-1	6	9.95

• The Schedule of Discounts to Purchasers Without Contract does not apply to this lamp. A discount of 30% of list will be allowed on noncontract purchases of one or more standard packages of this lamp, but no discount will be allowed on less than standard package quantities even if purchased with standard packages.
① 110-125 Volts

G-E GERMICIDAL LAMPS



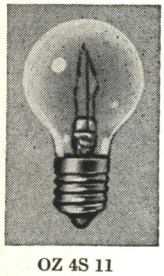
G8T5, G15T8, G30T8

Germicidal lamps transmit ultraviolet energy in wavelengths most effective in destroying bacteria and molds. They have wide application in hospitals, schools and other places where the control of air and surface bacteria is of greatest public concern. They are used also to provide sterile storage for foods, pharmaceuticals and other product protection. Germicidal lamps should be properly installed in correctly designed fixtures to give proper distribution of ultraviolet for air disinfection.

Watts	Bulb	Base	U-V Output Watts	Lamp Ordering Abbrev.	Std. Pkg. Qty.	List Price
8	T-5	Min. Bipin	1.5	G8T5	24	$3.50
15	T-8	Med. Bipin	2.9	G15T8	24	3.25
30	T-8	Med. Bipin	7.2	G30T8	24	4.95

G-E OZONE LAMP

The G-E Ozone Lamp will kill the odors in a small room, banish smells in a short time after cooking, prevent mustiness, and eliminate stale after-odors of tobacco smoke.



OZ 4S 11

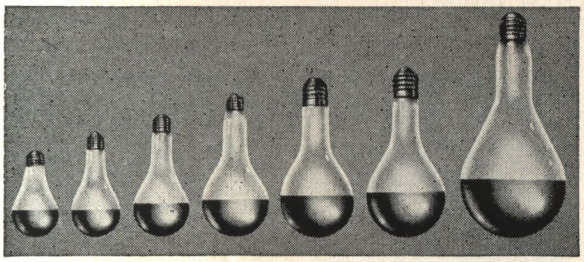
Ozone lamps are generally operated in shielded fixtures mounted on the wall just above eye level. They can also be operated inside enclosed air circulating devices. In either application one ozone lamp should be used for each 1000 cubic feet of space served.

G-E Ballast No. 89G418 is available for use with the ozone lamp or a standard 40-watt filament lamp may be used as a ballast.

Lamp Ordering Abbrev.	Watts	Bulb	Base	Description	Std. Pkg. Qty.	Life	Max. Ovrl. Lgth.	List Price
OZ4S11	4	S-11	Inter.	Clear	120	4000①	2¼	$1.25

① Approximate life under specified test conditions with continuous burning.

G-E SILVERED BOWL LAMPS

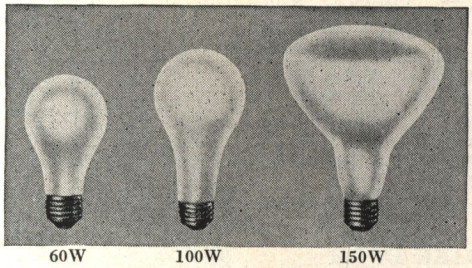


60W 100W 150W 200W 300W 500W 750W 1000W

Used with indirect lighting equipment. Have inside frosted bulb with coating of mirrored silver on the bowl.

Watts	Bulb	Base	Max. Over-All L'gth	Lamp Ordering Abbrev.	Std. Pkg. Qty.	List Price
60	A-19	Med.	4 7/16	60A/SB	120	$0.41
100	A-21	Med.	6 1/16	100/1SB	120	.43
150	PS-25	Med.	6 15/16	150/SB	60	.62
200	PS-30	Med.	8 1/16	200/SBIF	60	.88
300	PS-35	Mog.	9 3/8	300/SBIF	24	1.40
500	PS-40	Mog.	9 3/4	500/SBIF	24	2.00
750	PS-52	Mog.	13 1/16	750/SBIF	6	5.00
1000	PS-52	Mog.	13 1/16	1000/SBIF	6	5.20

G-E WHITE LAMPS

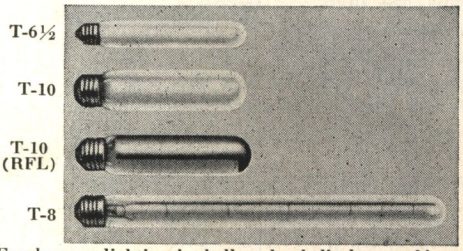


60W 100W 150W

Gives almost perfect light diffusion, is clean and white in appearance — ideal for reading lamps.

60	A-19	Med.	4 7/16	60A/W	120	$0.25
100	A-21	Med.	5 5/16	100A/W	120	.28
150	R-40	Med.	6 1/8	150R/W	24	1.15

G-E SHOWCASE LAMPS



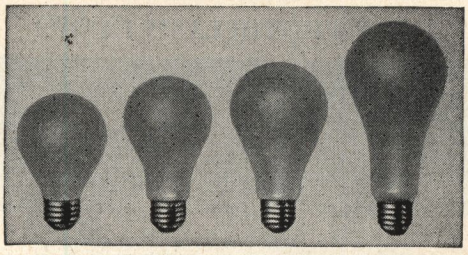
For showcase lighting, in shallow-depth displays, and in small trough-like reflectors. Reflector lamps have a built-in reflecting surface and a spring contact base.

25	T-6½ Clear	Inter.	5½	25T6½	60	$0.55
25	T-6½ I.F.	Inter	5½	25T6½/IF	60	.60
25	T-10 Clear	Med.	5 5/8	25T10	60	.32
25	T-10 I.F.	Med.	5 5/8	25T10/IF	60	.34
25	T-10 Refl. (Lt. I.F.)	Med.	5 5/8	25T10/RFL	60	1.40
40	T-10 Refl. (Lt. I.F.)	Med.	5 5/8	40T10/RFL	60	1.40
40	T-8 Clear	Med.	11 7/8	40T8	24	1.20
40	T-8 I.F.	Med.	11 7/8	40T8/IF	24	1.30
40	T-10 Clear	Med.	5 5/8	40T10	60	.32
40	T-10 I.F.	Med.	5 5/8	40T10/IF	60	.34
40	T-10 Reflector	Med.	5 5/8	40T10/RFL	60	1.40

★ Also available in 115 or 125 volts at same prices.

G-E YELLOW LAMPS

115-125 Volts



25W 60W 100W 150W

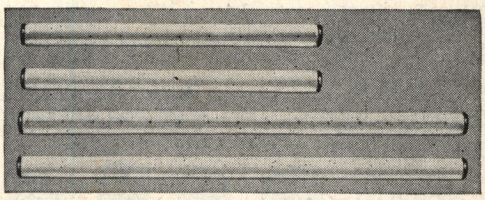
Yellow light does not attract bugs. For comfortable outdoor lighting of porches, roadside stands, summer camps — any large or small area — suggest G-E Yellow Lamps.

Watts	Bulb	Base	Lamp Ordering Abbreviation	Std. Pkg. Qty.	List Price
† 25	A-19	Med.	25A/Y	120	$0.30
60	A-19	Med.	60A/Y	120	.29
100	A-21	Med.	100A21/61Y	120	.31
150	PS-25	Med.	150PS25/Y	60	.39

† 115, 120 Volts.

G-E LUMILINE LAMPS

115-125 Volts



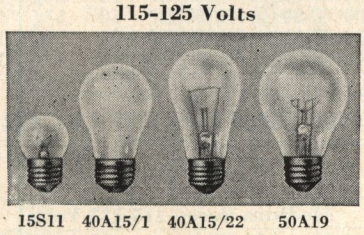
L-40, L-40IF, L-60, L-60IF

These lamps provide continuous lines of clear or colored light of low brightness, They are ideally suited to modern decorative concepts for built-in illumination or applied decoration; for displays, niches, mirrors and the like.

Watts	Bulb and Finish	Base	Max. Over-all Length, Inches	Lamp Ordering Abbrev.	Std. Pkg. Qty.	List Price
40	T-8 Clear .	Disc	11¾	L40	24	$1.60
40	T-8 I. F...	Disc	11¾	L40/IF	24	1.60
40	T-8 White.	Disc	11¾	L40/W	24	1.60
40	T-8 Straw.	Disc	11¾	L40/ST	24	1.70
60	T-8 Clear .	Disc	17¾	L60	24	1.80
60	T-8 I. F...	Disc	17¾	L60/IF	24	1.80
60	T-8 White.	Disc	17¾	L60/W	24	1.80
60	T-8 Straw.	Disc	17¾	L60/ST	24	1.90

G-E APPLIANCE LAMPS

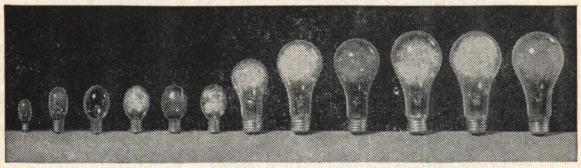
115-125 Volts



15S11 40A15/1 40A15/22 50A19

10	C-7	Cand.	2⅛	10C7	240	$0.23
10	C-7	D. C. Bay.	2 3/16	10C7DC	120	.26
15	S-11	Med.	2¼	15S11/102	120	.27
15	T-7	D. C. Bay.	2 5/8	15T7DC	60	.35
25	T-8	D. C. Bay.	2 5/8	25T8DC	60	.35
40	A-15	Med.	3¾	40A15/1	120	.21
40	A-15	Med.	4	40A15/22	120	.25

G-E PHOTOFLASH LAMPS



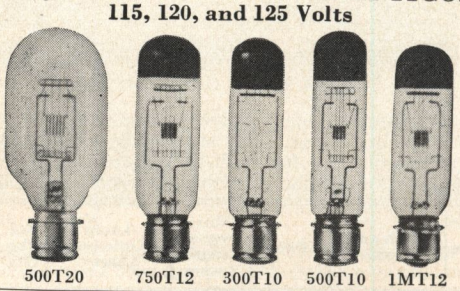
M2 8 SM 5 5B 6 11 22 22B 31 50 50B

Lamp No.	Light Output Lumen Seconds	Bulb	Base	Case Qty.	Carton Qty.	‡List Price
PowerMite *PH/M2	7,000	B-6¼	Min.Bay. without pins	120	12	$0.11
PowerMite *PH/M2B	5,000	B-6¼		120	12	.13
*PH/SM	4,800	B-11 Clear	S.C.Bay.	120	12	.16
*PH/5	18,500	B-11 Clear	S.C.Bay.	120	12	.14
*PH/5B	8,800	B-11 Blue	S.C.Bay.	120	12	.17
*PH/6	17,500	B-11 Clear	S.C.Bay.	120	12	.16
*PH/6B	8,000	B-11 Blue	S.C.Bay.	120	12	.20
*PH/8	9,000	BT-8 Clear	S.C.Bay.	120	12	.13
*PH/11	32,000	A-15 Clear	Med.	120	8	.19
*PH/11B	14,500	A-15 Blue	Med.	120	8	.23
†PH/22	70,000	A-19 Clear	Med.	120	6	.21
†PH/22B	32,000	A-19 Blue	Med.	120	6	.27
*PH/31	81,000	A-21 Clear	Med.	60	6	.28
*PH/31B	37,000	A-21 Blue	Med.	60	6	.34
†PH/50	100,000	A-21 Clear	Med.	60	6	.26
†PH/50B	45,000	A-21 Blue	Med.	60	6	.32

* Battery operation only. † Voltage operation 3–125 volts.

PROJECTION AND STEREOPTICON

115, 120, and 125 Volts



500T20 750T12 300T10 500T10 1MT12

Lamp Code	Watts	Bulb and Finish	Lamp Ordering Abbrev. (Exc. Volts)	Rated Avg. Life, (Hrs.)	Max. Overall Length, Inches	Avg. Light Center Length, Inches	§List Price
Single-Contact Bayonet Base †							
CFC	150	T-8 Cl.	PH/150T8/70	25	3⅝	1⅜	$2.00
CLG	300	T-8½ Cl.	PH/300T8½/10	25	4⅛	1⅜	3.10
Medium Prefocus Base †							
CXK	300	T-10‡. .	PH/300T10P	25	5¾	2 3/16	4.20
CZX	500	T-10‡. .	PH/500T10P	25	5¾	2 3/16	4.60
DMX	500	T-20 Cl.	PH/500T20P	50	5¾	2 3/16	4.90
DDB	750	T-12‡. .	PH/750T12P	25	5¾	2 3/16	4.95
DFD	1000	T-12‡. .	PH/1M/T12P	10	5¾	2 3/16	5.75

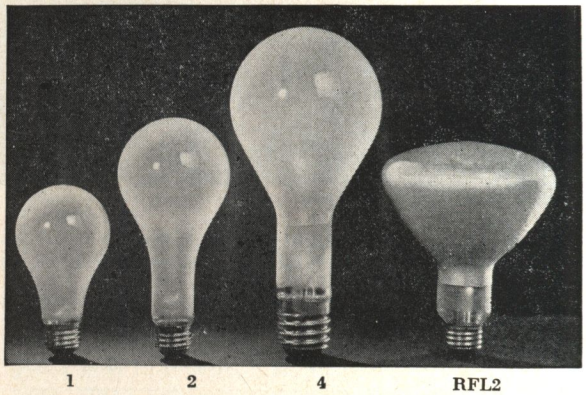
‡ Clear bulb with opaque end. † Case Quantity 24.

G-E PHOTOGRAPHIC ENLARGER LAMPS

Lamp No.	Watts	Bulb and Finish	Life (Hrs.)	Case Qty.	Carton Qty.	‡List Price
Medium Base—115-125 Volts						
① PH/111	75	S-11 White	25	120	6	$0.80
PH/211	75	A-21 White	100	60	6	.55
PH/212	150	A-21 White	100	60	6	.60
PH/213	250	A-21 White	3	60	6	.60
PH/302	500	PS-30 White	100	60	1	1.50

① Single contact bayonet base.

G-E PHOTOFLOOD LAMPS



1 2 4 RFL2

Reflector No. RFL2 —Specially shaped bulb, with inside coating of mirror aluminum redirects the light so that most effective illumination is obtained within a 60-degree zone. 5 inches in diameter, 6½ inches over-all.

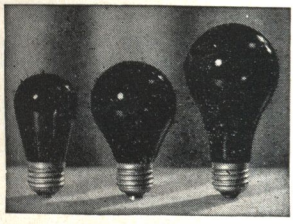
Reflector Photospot No. RSP2 —Is ideal for highlighting, backlighting and edgelighting. Its light has been squeezed into a beam of approximately 20°— resulting in a punch of light more than seven times more powerful than that of the RFL2.

Lamp No.	Watts	Bulb	Base	Rated Life	Case Qty.	Carton Qty.	‡List Price
115-120 Volts							
PH/1	250	A-21 I.F.	Med.	3	60	6	$0.28
PH/2	500	PS-25 I.F.	Med.	6	60	6	.47
PH/4	1000	PS-35 I.F.	Mog.	10	24	1	1.45
PH/RFL2	500	R-40 I.F.	Med.	6	24	1	1.50
PH/RSP2	500	R-40 I.F.	Med.	6	24	1	1.65
PH375/34R4	375	R-40 I.F.	Med.	4	24	1	1.50

DARK ROOM LAMPS

115-125 Volts

(Medium Base)



S-14 A-19 A-21

The 10 and 25-watt ruby lamps are used with blue sensitive and orthochromatic films and plates; larger sizes for less sensitive films. Amber bulbs are for darkrooms where enlarging and contact printing papers are handled. Case Quantity 120 lamps.

Lamp Code	Lamp Ordering Abbreviation	Watts	Bulb and Color	Carton Qty.	‡List Price
BPD	PH/10S14/NDA	10	S-14 Amber	6	$1.60
BPG	PH/10S14/NDR	10	S-14 Ruby	6	1.60
BAJ	PH/25A/NDA	25	A-19 Amber	6	1.60
BAS	PH/25A/NDR	25	A-19 Ruby	6	1.60
BBS	PH/40A/NDA	40	A-21 Amber	6	1.75
BBX	PH/40A/NDR	40	A-21 Ruby	6	1.75
BCC	PH/60A21/NDA	60	A-21 Amber	6	1.90
BCJ	PH/60A21/NDR	60	A-21 Ruby	6	1.90

Flashtubes, Connectrons and **Modeling Lamps** are manufactured by the General Electric Company in a variety of sizes and types and are available on order.

§ List prices include Federal Excise Tax. ‡ Not subject to Federal Excise Tax.

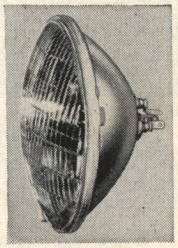
GENERAL ELECTRIC MINIATURE LAMPS

Through General Electric's lighting and product research, precision manufacturing and thorough testing, lamps of highest standards of performance are made available for every lighting purpose for every type of motor vehicle.

The new General Electric *All-Weather* Headlamps make seeing easier in rain, snow or fog; direct light further down the road and the "controlled light" makes passing easier. Aim-right gismoes on the lens makes for quick, accurate aiming with any aiming machine. They are not vulnerable to chipping, breaking or cracking.

SEALED BEAM LAMPS FOR 6-VOLT SERVICE
(Screw Terminal Bases — except as noted)

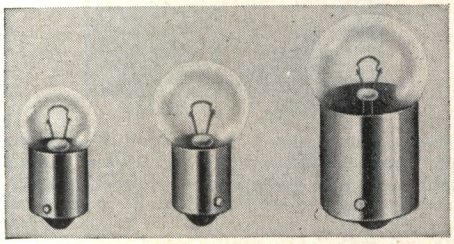
GENERAL ELECTRIC
All-Weather
HEADLAMP



Lamp Number	① Retail Price Per Lamp	① Dealer Net Price Per Lamp	PAR Bulb	Watts	Service
4010	$2.60	$1.67	46	30	Driving
4012	2.65	1.70	46	35	Fog (clear)
4012A	3.10	1.99	46	35	Fog (amber)
4013	2.75	1.77	46	25	Tractor
4015	2.50	1.60	36	35	Fog (clear)
4015A	2.75	1.76	36	35	Fog (amber)
4510	2.50	1.60	36	25	Utility
4510R	4.25	2.73	36	25	Signal (red)
4515	2.60	1.67	36	30	Spotlamp
4516	2.50	1.60	36	30	Hand Spot
4516R	4.25	2.73	36	30	Signal (red)
4535	2.85	1.83	46	30	Spotlamp
5040S	2.50	1.60	*56	50	Headlamp
				40	*All-Weather*

* Base: 3-contact lugs.

AUTOMOTIVE LAMPS FOR 6-VOLT SERVICE



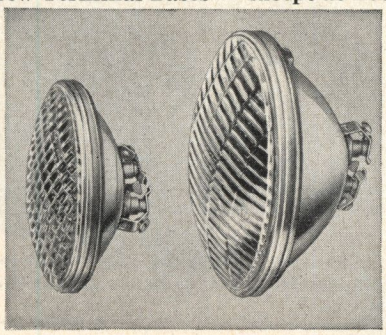
G–3½ G–4½ G–6

Lamp Number	① Retail Price Per Lamp	① Dealer Net Price 10 Lamps	Bulb	Base	Candle Power
51	$0.15	$0.96	G-3½	Min. Bay.	1
55	.15	.96	G-4½	Min. Bay.	2
63	.20	1.28	G-6	S. C. Bay.	3
64	.20	1.28	G-6	D. C. Bay.	3
81	.20	1.28	G-6	S. C. Bay.	6
82	.25	1.60	G-6	D. C. Bay.	6
87	.35	2.25	S-8	S. C. Bay.	15
88	.35	2.25	S-8	D. C. Bay.	15
209	.35	2.25	B-6	S. C. Bay.	15
210	.35	2.25	B-6	D. C. Bay.	15
1129	.35	2.25	S-8	S C. Bay.	21
1130	.40	2.57	S-8	D. C. Bay.	21
1133	.40	2.57	RP-11	S. C. Bay.	32
1154	.45	2.89	S-8	D. C. Index	21
1158	.45	2.89	S-8	D. C. Bay.	21
1323	1.00	6.42	RP-11	S. C. Pref.	32
2330	1.00	6.42	RP-11	D. C. Pref.	32
2331	1.00	6.42	RP-11	D. C. Pref.	32

Unit Package Quantities: Automotive miniature lamps 10, Sealed Beam Lamps 8, of the same G-E Lamp Number or specification.

① All prices include Federal Excise Tax.

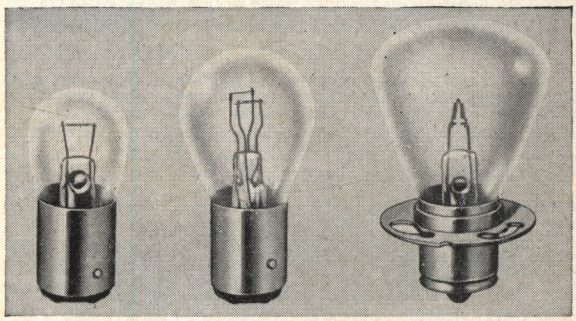
SEALED BEAM LAMPS FOR 12-VOLT SERVICE
(Screw Terminal Bases — except as noted)



Lamp Number	① Retail Price Per Lamp	① Dealer Net Price 8 Lamps	PAR Bulb	Watts	Service
4412	$2.60	$1.67	46	35	Fog (clear)
4412A	3.00	1.93	46	35	Fog (amber)
4413	2.65	1.71	46	35	Tractor
4415	2.60	1.67	36	35	Fog (clear)
4415A	2.85	1.83	36	35	Fog (amber)
4416	2.65	1.70	36	30	Hand Spot
4435	3.75	2.41	46	30	Spotlamp
5400S	2.50	1.60	*56	50	*All-Weather*
				40	Headlamp
4001	2.30	1.48	46	37.5	*All-Weather* Headlamp
4002	2.40	1.54	*46	50	*All-Weather*
				37.5	Headlamp
5440	2.65	1.70	*56	50	† *All-Weather*
				40	Headlamp

*Base: 3-contact lugs. †Rough Service.

AUTOMOTIVE LAMPS FOR 12-VOLT SERVICE



B–6 S–8 RP–11

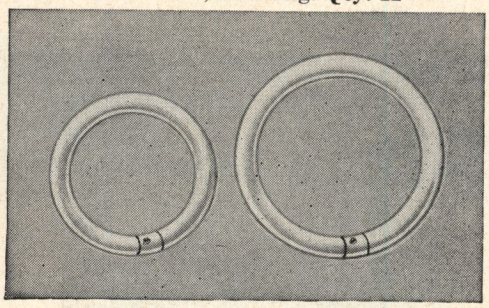
Lamp Number	① Retail Price Per Lamp	① Dealer Net Price 10 Lamps	Bulb	Base	Candle Power
53	$0.15	$0.96	G-3½	Min. Bay.	1
57	.15	.96	G-4½	Min. Bay.	2
57X	.20	1.28	G-4½	Min. Bay.	3
67	.20	1.28	G-6	S. C. Bay.	4
68	.20	1.28	G-6	D. C. Bay.	4
89	.20	1.28	G-6	S. C. Bay.	6
90	.25	1.60	G-6	D. C. Bay.	6
93	.35	2.25	S-8	S. C. Bay.	15
94	.35	2.25	S-8	D. C. Bay.	15
1003	.35	2.25	B-6	S. C. Bay	15
1004	.35	2.25	B-6	D. C. Bay.	15
1016	.55	3.53	S-8	D. C. Index	21
1034	.40	2.57	S-8	D. C. Index	32
1073	.35	2.25	S-8	S. C. Bay.	32
1141	.35	2.25	S-8	S. C. Bay.	21
1142	.35	2.25	S-8	D. C. Bay.	21
1143	.45	2.89	RP-11	S. C. Bay.	32
1176	.45	2.89	S-8	D. C. Bay.	21
1327	1.00	6.42	RP-11	S. C. Pref.	32

GENERAL ELECTRIC LAMPS

★ 120 Volts, except where noted.

G-E CIRCLINE FLUORESCENT LAMPS

4 Pin Base, Std. Pkg. Qty. 12



T-9 T-10

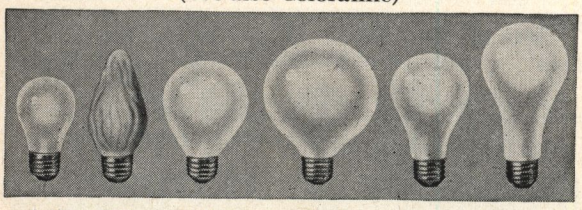
Circline fluorescent lamps have wide use in residential floor and table lamps as well as in commercial and industrial applications.

Watts-Bulb	Outside Circle Diam.	Color	Lamp Ordering Abbreviation	Price
22 T-9	8¼″	Cool White	FC8T9/CW	$3.50
		De Luxe Warm Wh.	FC8T9/WWX	3.60
32 T-10	12″	Cool White	FC12T10/CW	3.50
		De Luxe Warm Wh.	FC12T10/WWX	3.60
①40 T-10	16″	Cool White	FC16T10/CW/RS	4.50
		De Luxe Warm Wh.	FC16T10/WWX/RS	4.70

① Rapid Start.

G-E SIGN AND DECORATIVE LAMPS

(See also Coloramic)



A-15 F-15 G-18½ G-25 A-21 A-23

Outside coated (O.C.) flameshape and round bulb lamps are used where the bulb shape is related to the artistic design of the luminaire. Outside coated lamps not recommended for outdoor use.

Watts	Bulb and Finish	Base	Lamp Ordering Abbrev.	Std. Pkg. Qty.	List Price Clear	List Price Colors
6	S-6 Clear	Cand.	6S6	240	$0.22	...
7	C-7 (NiteL'gt)③	Cand.	7C7*①	240	.20	.20
7	C-7 White O. C.	Cand.	7C7/W*	240	.20	...
10	S-11 Clear⑤	Inter.	10S11N①	120	.23	.30
7½	S-11 Clear⑥	Med.	7½S/①	120	.22	.25
10	S-14 Clear⑤	Med.	10S14	120	.23	.30
10	S-14 I. F.	Med.	10S14/IF	120	.23	...
15	A-17②	Med.	15A17/①	120	.32	.32
15	F-10 O. C. ④	Cand.	15FC/①	60	.35	.35
25	F-15 O. C. ④	Med.	25F/①*	120	.30	.30
25	A-19 ② Clear	Med.	25A/①	120	.26	.30
25	G-18½ O. C. ④	Med.	25G18½/①	120	..	.40
25	G-25 ④	Med.	25G25/①	60	..	.47
40	A-21 ②	Med.	40A/①	120	..	.37
40	G-25 O. C. ④	Med.	40G/①	60	..	.47
60	A-21 ②	Med.	60A21/①	120	..	.47

① Substitute color symbol in place of ① in ordering abbreviation, thus: 25A/B.

② Colors: blue (B), flametint (FT), green (G), ivory (V), orange (O), red (R), rose (R2), and yellow (Y).

③ Colors: blue (B), green (G), red (R), orange (O), white (W).

④ Colors: flametint (FT), white (W), ivory (V).

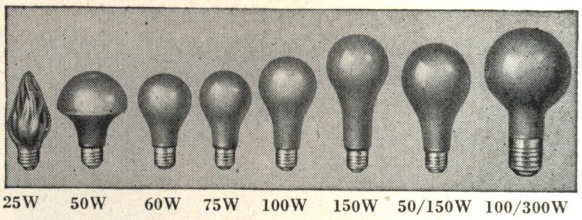
⑤ Colors: blue (CB), flametint (CFT), green (CG), orange (CO), red (CR), white (CW), yellow (CY).

⑥ Colors: blue (CB), green (CG), orange (CO), red (CR), white (CW).

★ Also available in 115 or 125 Volts at same prices.
* 115-125 Volts.

G-E COLORAMIC LAMPS

115-125 Volts



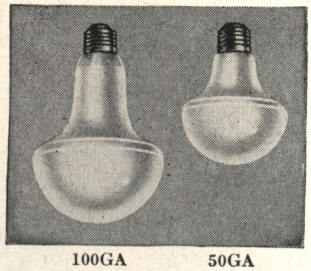
25W 50W 60W 75W 100W 150W 50/150W 100/300W

G-E Coloramic Bulbs add new color and beauty to furnishings and complexions. Used in place of inside frosted lamps where more decorative effects are desired.

Watts	Bulb	Base	Lamp Ordering Abbreviation	Std. Pkg. Qty.	List Price
25	F-15	Med.	25F/DPK	120	$0.30
50	GA-25	Med.	50GA/DPK	60	.55
60	A-19	Med.	60A/DPK	120	.27
75	A-19	Med.	75A19/PK①	120	.29
100	A-21	Med.	100A/DPK①	120	.29
150	A-23	Med.	150A/DPK①	60	.32
50-100-150	PS-25	3-Cont. Mog.	50/150M/DPK①	60	.69
100-200-300	G-30	3-Cont. Mog.	100/300DPK	60	.99

① For other colors, in place of DKP for Dawn Pink substitute SKY for Sky Blue, SPG for Spring Green or SUN for Sun Gold, same price.

G-E "GA" LAMPS

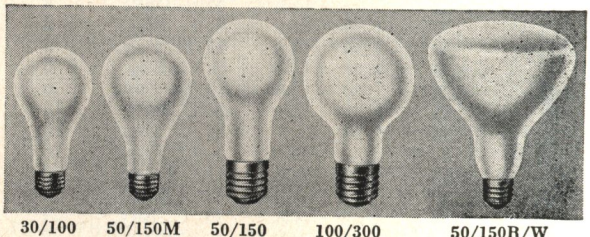


100GA 50GA

Decorative when lighted or unlighted. For shower type or simple lamp ceiling fixtures. Soft tinted enamel bowl sends light upward to give pleasant indirect lighting effect.

Watts	Bulb	Base	Lamp Ordering Abbreviation	Std. Pkg. Qty.	List Price
50	GA-25	Med.	50GA	60	$0.55
100	GA-30	Med.	100GA	60	.75

G-E THREE-LITE LAMPS



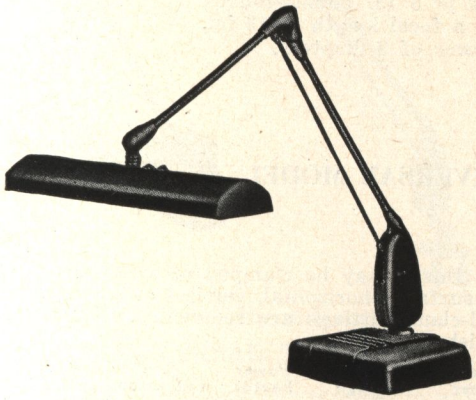
30/100 50/150M 30/230M 50/150 100/300 50/150R/W

Give three levels of lighting. Used generally in table and floor lamps. Three contact bases.

30-70-100	A-21 I. F.	Med.	30/100	120	$0.49
50-100-150	PS-25 I. F.	Med.	50/150M	60	.55
50-100-150	PS-25 White	Med.	50/150M/W	60	.59
50-100-150	PS-25 I. F.	Mog.	50/150	60	.69
50-100-150	R-40 White	Med.	50/150R/W	24	1.19
30-200-230	PS-25 White	Med.	30/230M/1W	60	.65
100-200-300	G-30 White	Mog.	100/300	60	.89

DAZOR *FLOATING* LAMPS

Fluorescent DESK MODEL

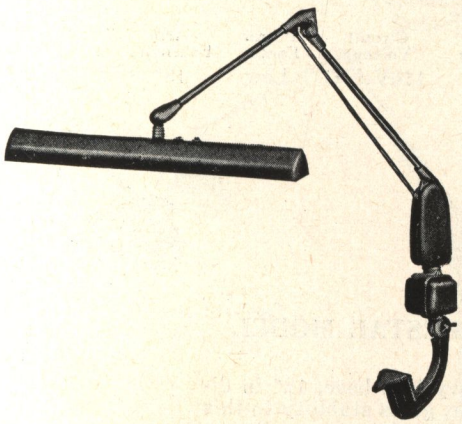


The weighted base does not require fastening down. It may be placed anywhere on a flat-top desk, table or other horizontal surface.

For Two T8 15-W Tubes

Model Number	Circuit Voltage	Power Factor	Arm Extension	Western Price	Eastern Price
2324	110V-60C	Low	24″	$34.25	$31.75
P-2324	110V-60C	High	24″	38.25	35.75

Fluorescent BRACKET MODEL



The gooseneck bracket base fastens to underside of drawing board, leaving upper edge clear for T square. Board cover drops into gooseneck.

For Two T8 15-W Tubes

Model Number	Circuit Voltage	Power Factor	Arm Extension	Western Price	Eastern Price
2434	110V-60C	Low	34″	$27.00	$25.75
P-2434	110V-60C	High	34″	31.00	29.75

Fluorescent UNIVERSAL MODEL

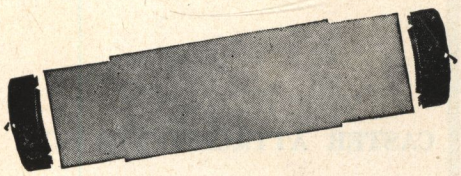


This Dazor may be clamped or screwed to any surface — horizontal, vertical or sloping. Dual-clamp fittings are removable. Screws furnished.

For Two T8 15-W Tubes

Model Number	Circuit Voltage	Power Factor	Arm Extension	Western Price	Eastern Price
2124	110V-60C	Low	24″	$25.00	$23.75
2134	110V-60C	Low	34″	25.00	23.75
P-2124	110V-60C	High	24″	29.00	27.75
P-2134	110V-60C	High	34″	29.00	27.75

DAZOR POLAROID† FILTER



The filter fits any 2-tube 15-watt fluorescent Dazor Floating Lamp. Consists of transparent Polaroid light-control film, 2 metal endpieces and 2 screws for easy fastening to the reflector housing.

Model Number	Western Price	Eastern Price
F-570	$3.75	$3.75

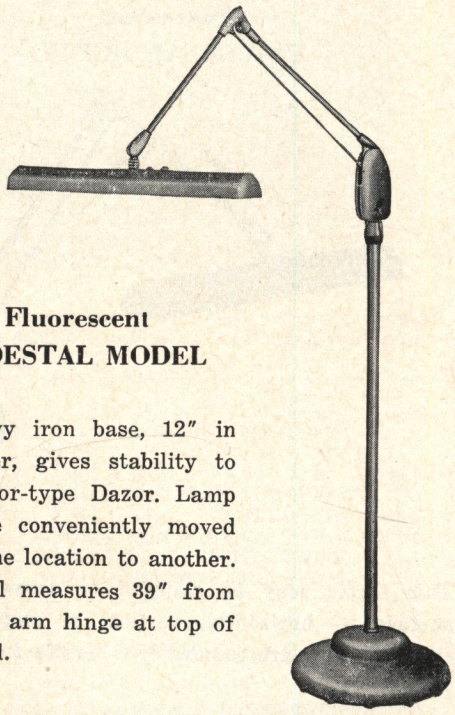
† ® Polaroid Corporation

Finish is statuary-bronze baked enamel over bonderizing. Optional colors available at no extra charge, gray, frost green or frost tan.

Prices do not include tubes or bulbs.

Eastern Price applies east of Denver and El Paso; Western Price applies, Denver, El Paso and points west. Prices and specifications are subject to change without notice.

DAZOR *FLOATING* LAMPS



Fluorescent PEDESTAL MODEL

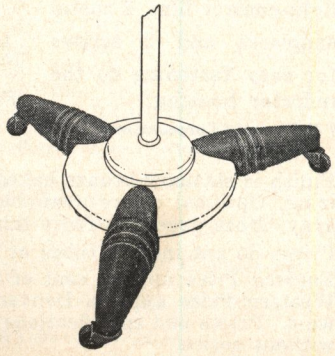
A heavy iron base, 12″ in diameter, gives stability to this floor-type Dazor. Lamp may be conveniently moved from one location to another. Pedestal measures 39″ from floor to arm hinge at top of pedestal.

For Two T8 15-W Tubes

Model Number	Circuit Voltage	Power Factor	Arm Extension	Western Price	Eastern Price
2224	110V-60C	Low	24″	$40.00	$37.50
2234	110V-60C	Low	34″	40.00	37.50
P-2224	110V-60C	High	24″	44.00	41.50
P-2234	110V-60C	High	34″	44.00	41.50

CASTER ATTACHMENTS FOR PEDESTAL MODEL

This accessory attaches to the base of any Dazor Pedestal model and permits the fixture to be easily rolled wherever desired. Priced and packaged three to a set.



Model Number	Western Price	Eastern Price
X-542	$13.25	$12.00

Magnifiers with Fluorescent Lighting For Three T5 6-Watt Tubes

Lens is 5 in. double-convex with a focal length of 13 in., a power of 3 diopters.



UNIVERSAL MODEL

This Dazor may be clamped or screwed to any surface—horizontal, vertical or sloping. Dual-clamp fittings are removable. Screws furnished.

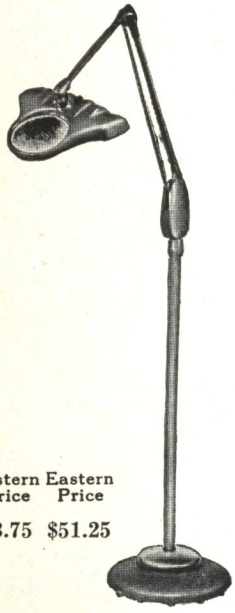
Model Number	Circuit Voltage	Power Factor	Arm Extension	Western Price	Eastern Price
M-209	110V-60C	Low	24″	$38.75	$37.50



DESK MODEL

The weighted base does not require fastening down. It may be placed anywhere on a flat top desk, table or other horizontal surface.

Model Number	Circuit Voltage	Power Factor	Arm Extension	Western Price	Eastern Price
M-270	110V-60C	Low	18″	$48.00	$45.50

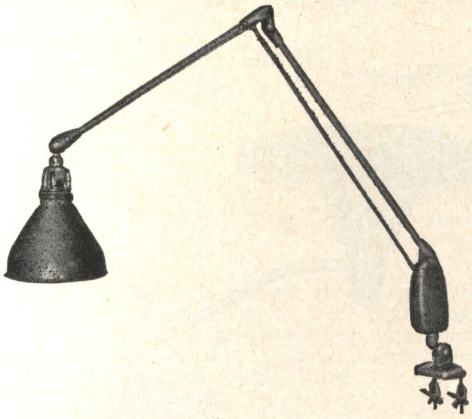


PEDESTAL MODEL

A heavy iron base, 12″ in diameter, gives stability to this portable, floor-type Dazor. Pedestal measures 39″ from floor to arm hinge at top of pedestal.

Model Number	Circuit Voltage	Power Factor	Arm Extension	Western Price	Eastern Price
M-210	110V-60C	Low	24″	$53.75	$51.25

DAZOR *FLOATING* LAMPS

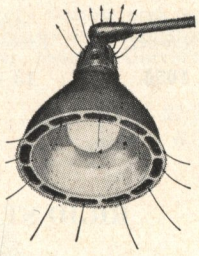


Air-Cooled Incandescent UNIVERSAL MODEL

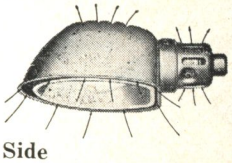
This Dazor may be clamped or screwed to any surface—horizontal, vertical or sloping. Dual-clamp fittings are removable. Screws furnished.

Model Number	Arm Extension	Western Price	Eastern Price
602	24″	$16.50	$15.25
603	34″	16.50	15.25

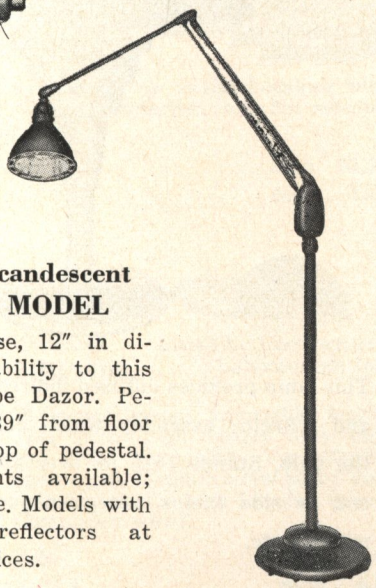
Air chamber between outer housing and inner reflector keeps shade comfortable to handle, avoids accidental burns. Inner reflector of polished aluminum is designed for a 60-watt bulb. Models with side-mounted reflectors at slightly higher prices.



Top-mounted Reflector



Side Mounted Reflector

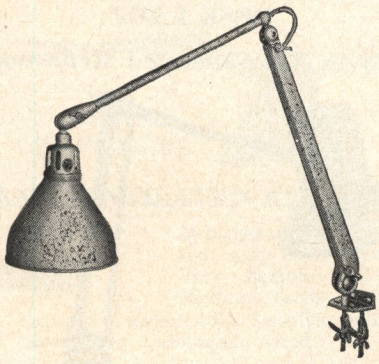


Air-Cooled Incandescent PEDESTAL MODEL

A heavy iron base, 12″ in diameter, gives stability to this portable, floor-type Dazor. Pedestal measures 39″ from floor to arm hinge at top of pedestal. Caster attachments available; see preceding page. Models with side mounted reflectors at slightly higher prices.

Model Number	Arm Extension	Western Price	Eastern Price
604	24″	$31.50	$29.00
605	34″	31.50	29.00

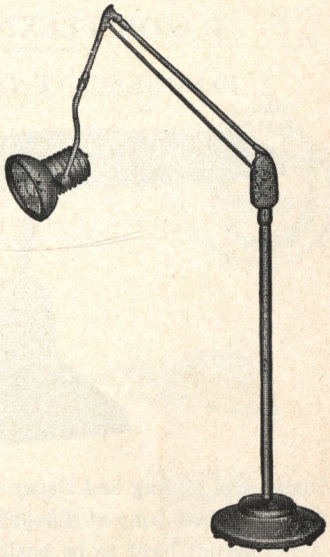
DAZOR ADJUSTABLE-ARM
Air-Cooled Incandescent Lamp



This lamp mounts solidly on the machine tool or bench, then holds fast in the position set. The L-shaped machine base bolts or screws to either a horizontal or vertical surface. Dual-clamp fittings are removable. Adjustable Arm employs two steel ball joints and the Dazor patented swivel joint to give the operator an unlimited field for positioning the light. Wing nuts provide positive control of tension. Reflector is **air cooled**—see opposite column. Models with side-mounted reflectors at slightly higher prices.

Model Number	Arm Extension	Western Price	Eastern Price
1100	31″	$12.00	$10.75
1101	20″	12.00	10.75

DAZOR FLOATING-ARM
Air-Cooled Incandescent Lamp With Yoke-Mounted Reflector

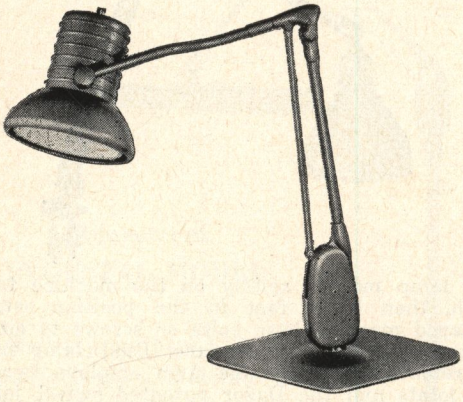


A major feature of this lamp is the mounting of the special reflector on a curved forearm. This half yoke permits the reflector to pivot forward or backward and the forearm to rotate without changing the center of gravity. The combination of concentrated light, ventilation, and extra flexibility recommends the fixture for any exacting application such as a Surgical Examination Lamp.

This model also has a heavy iron base for stability. See listing for caster attachments.

Model Number	Arm Extension	Western Retail	Eastern Price
794	34″	$42.00	$39.50

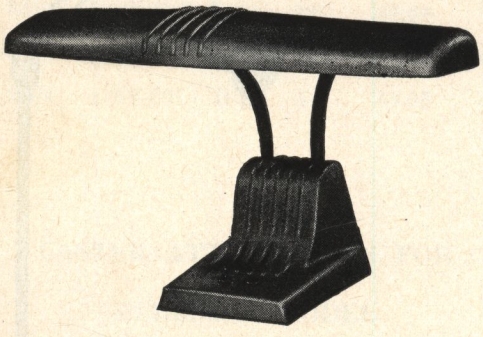
DAZOR FLOATING-ARM DESK LAMP With Yoke-Mounted Reflector



For unrestricted light placement, the Dazor Floating Arm permits raising, lowering, pushing, pulling, or tilting the reflector to the desired position. Stays without heightening of any kind. Desk model has an arm reach of 21 inches, uses a 60-watt bolb.

Model Number	Arm Extension	Retail Price Western	Retail Price Eastern
1057	21 in.	$25.75	**$24.50**

DAZOR FLEXIBLE-ARM FLUORESCENT DESK LAMP

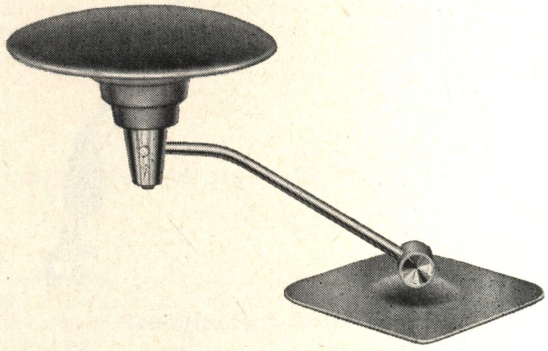


Distinctive styling and Dazor quality combine in this full-sized desk lamp at a popular price. Twin Flexible Arms permit light to be positioned easily from 8 to 14 inches above desk surface. Rigid 20½-inch reflector is .035 drawn steel; base is zinc die casting with felt-aluminum base plate. A 9-foot heavy thermoplastic cord is furnished.

For Two T8 15-Watt Tubes

Model Number	Circuit Voltage	Western Price	Eastern Price
1000	110V-60C	$18.00	**$16.75**

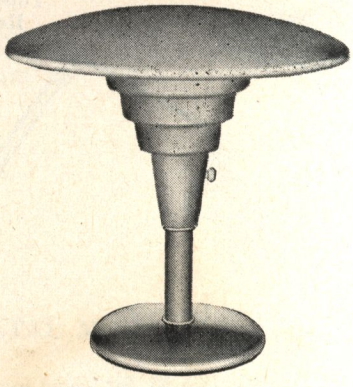
DAZOR SWING-ARM DESK LAMP



An executive desk lamp that harmonizes with the appointments of virtually any office. Air cooled shade makes it comfortable when close to user. Diamond shaped base has rounded corners and beveled edges, sits flat on the desk.

Model Number	Arm Extension	Retail Price Western	Retail Price Eastern
1056	13 in.	**$26.00**	**$24.75**

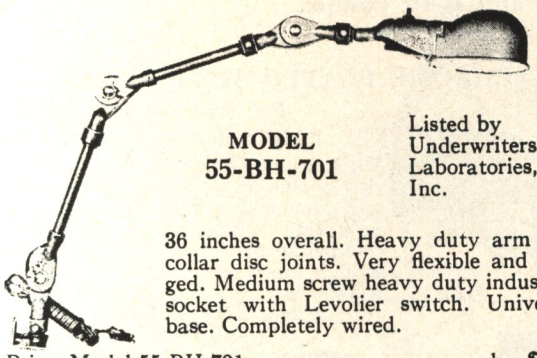
RIGID STANDARD TABLE LAMP



This lamp provides diffused indirect light and a shade and reflector assembly which dissipates heat from the bulb. Stands 14½ in. over all. For small desks, end or side tables, reception rooms, hotel or dormitory, etc.

Model Number	Retail Price Western	Retail Price Eastern
1055	**$13.75**	**$12.50**

FOSTORIA LOCALITES

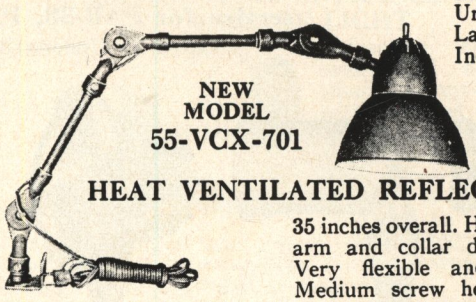


MODEL 55-BH-701

Listed by Underwriters' Laboratories, Inc.

36 inches overall. Heavy duty arm and collar disc joints. Very flexible and rugged. Medium screw heavy duty industrial socket with Levolier switch. Universal base. Completely wired.

Price, Model 55-BH-701 . . . . . each **$9.45**
In standard package of 4 . . . . . each **8.03**



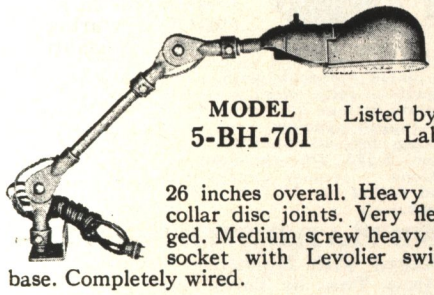
Listed by Underwriters' Laboratories, Inc.

NEW MODEL 55-VCX-701

HEAT VENTILATED REFLECTOR

35 inches overall. Heavy duty arm and collar disc joints. Very flexible and rugged. Medium screw heavy duty industrial socket with Levolier switch. Universal base. Completely wired.

Price, Model 55-VCX-701 . . . . . each **$10.95**
In standard package of 4 . . . . . each **9.31**

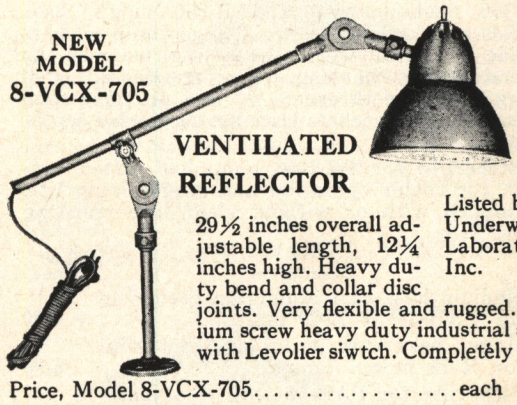


MODEL 5-BH-701

Listed by Underwriters' Laboratories, Inc.

26 inches overall. Heavy duty arm and collar disc joints. Very flexible and rugged. Medium screw heavy duty industrial socket with Levolier switch. Universal base. Completely wired.

Price, Model 5-BH-701 . . . . . each **$7.75**
In standard packages of 4 . . . . . each **6.59**



NEW MODEL 8-VCX-705

VENTILATED REFLECTOR

Listed by Underwriters' Laboratories, Inc.

29½ inches overall adjustable length, 12¼ inches high. Heavy duty bend and collar disc joints. Very flexible and rugged. Medium screw heavy duty industrial socket with Levolier siwtch. Completely wired.

Price, Model 8-VCX-705 . . . . . each **$9.60**
In standard package of 4 . . . . . each **8.16**

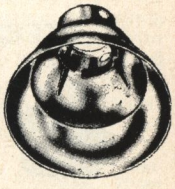


NEW NYLON KOOLSHIELD
for BH and HX Reflectors

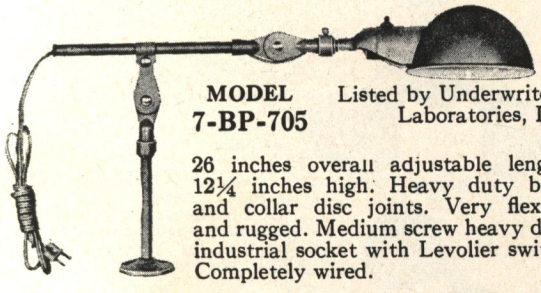
Fits all old model as well as new model Localites with half shade reflector. Positive protection from hot reflector when using 100 watt lamp.

Price, Nylon Koolshield . . . . . each **$1.20**
In standard package of 4 . . . . . each **1.02**

SPECIAL INNER REFLECTOR SHIELD for VCX Reflectors



Provides extreme coolness when using 100 watt lamp. An accessory easily attached inside of VCX Ventilated Reflector. Made of aluminum with high mirror finish.

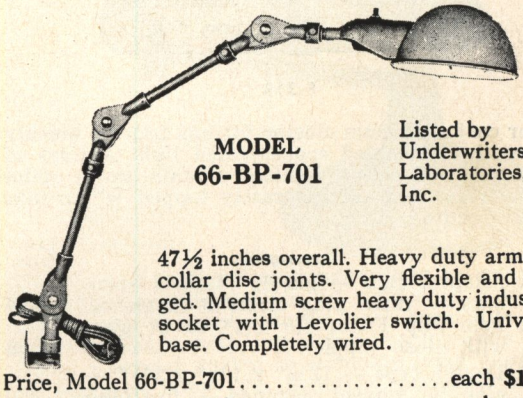


MODEL 7-BP-705

Listed by Underwriters' Laboratories, Inc.

26 inches overall adjustable length, 12¼ inches high. Heavy duty bend and collar disc joints. Very flexible and rugged. Medium screw heavy duty industrial socket with Levolier switch. Completely wired.

Price, Model 7-BP-705 . . . . . each **$8.00**
In standard packages of 4 . . . . . each **6.80**



MODEL 66-BP-701

Listed by Underwriters' Laboratories, Inc.

47½ inches overall. Heavy duty arm and collar disc joints. Very flexible and rugged. Medium screw heavy duty industrial socket with Levolier switch. Universal base. Completely wired.

Price, Model 66-BP-701 . . . . . each **$10.30**
In standard package of 4 . . . . . each **8.76**

General Specifications: Finish, semi-gloss Vista Green baked enamel. Lamps not included.

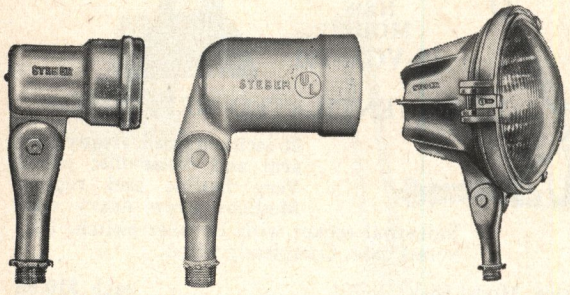
Write for complete catalog.

F-3601

STEBERLITES

Steberlites are cast aluminum fixtures and accessories for every lighting service for PAR-38, PAR-56 and R-40 Lamps.

Listed by Underwriters' Laboratories, Inc.



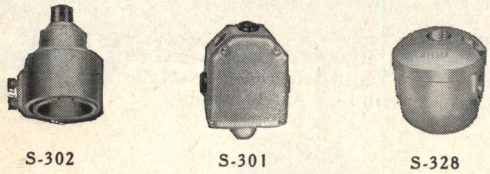
S-300 S-350 S-400

No. S-300 medium base and S-350 mogul base Steberlites are furnished with Silicone lamp gaskets to provide a superior weatherproof seal between the lamp and socket housing. Universally adjusted mounting arms are threaded ½" and provided with locknuts. Porcelain sockets have spring-loaded center contacts.

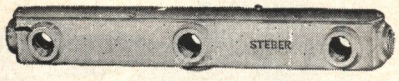
S-400 Steberlite for PAR-56 lamp has finned construction for cooler operation and longer lamp life. It is supplied with or without clear heat-resisting protective lens.

Cat. No.	Description	List Price
S-300	Medium base cast aluminum Steberlite for PAR-38 or R-40 lamps	$ 3.00
S-350	Mogul base cast aluminum Steberlite for R-40 mogul lamps	6.00
S-400	Steberlite for PAR-56 with clear heat-resisting lens	15.00
S-401	Same as S-400 but without lens	12.90

STEBER CLUSTER FITTINGS



S-302 S-301 S-328



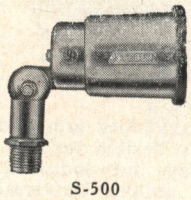
S-318

Steber cast aluminum cluster fittings provide quickly and easily assembled concentrated light sources of any number of lamps. Fittings contain ample splice compartment and are accurately tapped ½" to take any Steberlite.

Cat. No.	Description	List Price
S-301	Adapter Box — six ½" tapped openings — three plug closures furnished.	$ 3.00
S-302	Pole Slip Fitter for 1½" to 2" pipe, with close nipple	1.90
S-318	Trough type — 12½" x 1½" x 1½" — nine ½" tapped openings — five plug closures furnished	4.25
S-328	Acorn Adapter Fitting — four ½" tapped openings — one plug closure furnished.	2.00

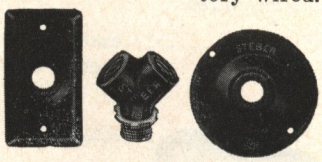
CHROME PLATED STEBERLITES

For Medium Base PAR-38 and R-40 Lamps



S-500

Die cast non-ferrous metal Steberlite S-500 in polished chrome has weatherproof articulated universal adjusting joint, ½" threaded mounting arm and "Hycar" black rubber lamp gasket. Porcelain lamp socket securely mounted and factory wired. Listed by U. L.



S-501 S-502 S-503

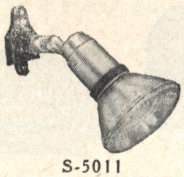
Mounting fittings for single or two-light units are cast aluminum finished in rich black Ultranamel insuring ultra-modern, beautiful appearance.

S-500	Chrome plated Steberlite with Hycar gasket—fully wired.	36	36	28	$2.00
S-501	Switch plate fittings 2½" x 4⅜" one ½" tapped opening.	12	12	2	.75
S-502	"Y" fitting for attachment to S-501 or S-503 for two-lamp installations.	12	12	1½	.75
S-503	4" round fitting for 3¼" or 4" outlet box.	12	12	3	.60

CHROME PLATED STEBERLITES

Packaged with Mounting Flanges One- Two- or Three-Lamp

The fixtures listed below include the chrome plated S-500 Steberlite, packaged with special single, two or three lamp fittings for surface or outlet box mounting. Fittings cast aluminum and finished in rich black.

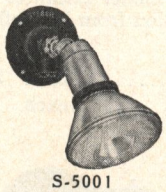


S-5011

S-5011 SINGLE-LAMP

For Wall or Pole Mounting

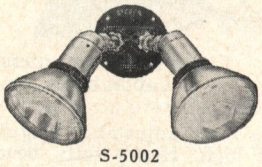
Chrome plated Steberlite with cast aluminum mounting flange in black finish, for open wiring. Flange equipped with two porcelain bushings for protecting service entrance leads and provided with two screw holes for easy attachment to wall or pole.



S-5001

S-5001 SINGLE-LAMP

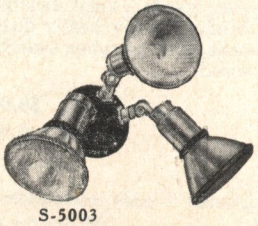
Mounting flange 4-1/16" in diameter fits 3¼" or 4" outlet box or may be mounted directly to wall or pole. Has two ½" threaded openings — one for lampholder, one for service entrance—open wiring or conduit. Flange is cast aluminum finished in black — lampholder, chrome plated.



S-5002

S-5002 TWO-LAMP

Same as S-5001 except two chrome plated lampholders furnished and mounting flange provided with three ½" threaded openings.



S-5003

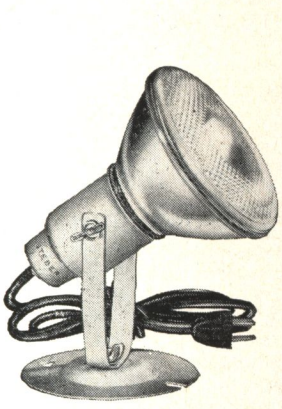
S-5003 THREE-LAMP

Includes three chrome plated lampholders and 4½" round cast aluminum mounting flange having four ½" threaded openings. Wall, pole or outlet box mounting (3¼" or 4" box).

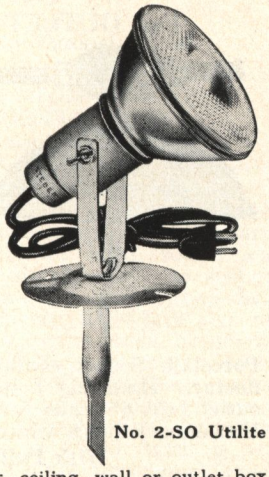
Cat. No.	Cart. Quan.	Weight Std. Pkg.	Weight Std. Pkg.	List Price
S-5011	1	12	12	$2.50
S-5001	1	12	12	2.95
S-5002	1	12	20	5.30
S-5003	1	6	14	7.80

STEBER LIGHTING EQUIPMENT

No. 2 UTILITES



No. 2 Utilite

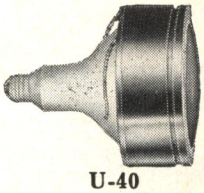


No. 2-SO Utilite

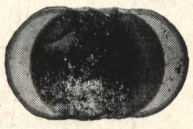
Utilites are available for counter, ceiling, wall or outlet box mounting. They are ideal for window displays, counter lighting, accent lighting, outdoor floodlighting, for lighting home play areas or safety and protection against prowlers. Utilites are also widely used for holiday outdoor lighting decorative effects.
Neat, compact, and sturdy, they accommodate PAR-38 and R-40 lamps. Drawn steel with weatherproof finish. "U" bracket for universal adjustment. Gasket provides weatherproof seal between lamp and socket.

Cat. No.	Mounting Provision	Cart. Quan.	Std. Pkg.	Weight Std. Pkg.	List Price
2	Base plate for surface or outlet box mounting — 6′ cord set.	1	12	12	$2.05
2-SO	Same as No. 2 plus ground spike for turf mounting.	1	12	12	2.20

UTILITE COLOR EQUIPMENT



U-40



U-45

U-40 lensholder equipped with sturdy spring clip—attaches easily to either PAR-38 or R-40 lamps. Available with colored lenses in amber, blue, green or red as listed below:

Cat. No.	Description	Cart. Quan.	Std. Pkg.	Weight Std. Pkg.	List Price
U-40	Lensholder	1	12	5	$0.70
U-45	Lens only — amber, blue, green or red—specify color desired.	6	6	2	1.05

No. 8 SWIVEL UTILITE ON OUTLET BOX COVER

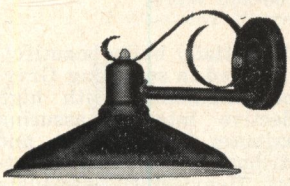


Swivel type Utilite for attachment directly to 3¼″ or 4″ outlet box. Substantial cast aluminum mounting base. Furnished with flexible connecting leads. Swivels freely (360° horizontal, 180° vertical) and holds position without set screws. Listed by U. L.

Cat. No.	Mounting Provision	Cart. Quan.	Std. Pkg.	Weight Std. Pkg.	List Price
8	Outlet Box Cover	1	12	9	$2.20

Lamps Not Included

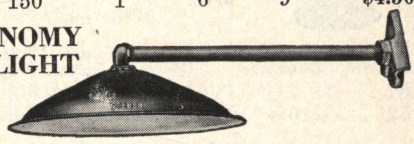
RESIDENTIAL ENTRANCE AND GARAGE LIGHT



Attractive streamlined, ornamental design finished in antique black with polished brass trim to harmonize with today's modern architecture. Over home entrances or porches, or attached to garage, it adds distinction and charm while it provides light for safety and convenience. Factory wired. Mounting flange to fit 3¼″ and 4″ outlet boxes.

Cat. No.	Lamp Watts	Cart. Quan.	Std. Pkg.	Weight Std. Pkg.	List Price
YGB-10	150	1	6	9	$4.50

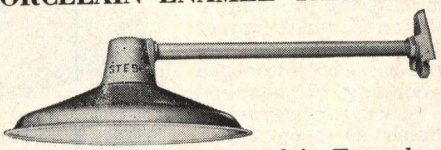
ECONOMY YARDLIGHT



U. L. approved factory wired yardlight. Heavy gauge steel reflector. Arm is ½″ rigid pipe. Cast aluminum mounting flange. Vibresist lamp gasket. Finished in durable Ultranamel, graytone outside, white inside.

Cat. No.	Diameter	Watts	Cart. Quan.	Std. Pkg.	Weight Std. Pkg.	List Price
YEU-10	10″	60	1	10	17	$2.75
YEU-12	12″	100	1	10	21	3.00

PORCELAIN ENAMEL YARDLIGHT

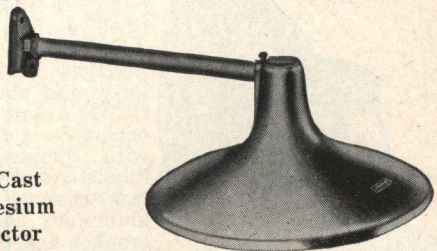


Quality Vitreous Porcelain Enamel

Heavy gauge metal reflector is drawn in one piece and attached to socket hood with three heavy screws and lock washers. Reflector is vitreous porcelain enamel beautiful Greentone exterior, gleaming white inside. Arm is ½″ rigid pipe. Socket factory wired for quick installation. Cast aluminum mounting bracket and vibresist gasket to eliminate lamp vibration and lengthen lamp life. Listed by U. L. and meets REA specifications.

Cat. No.	Diameter	Watts	Cart. Quan.	Std. Pkg.	Weight Std. Pkg.	List Price
YRP-12	12″	100	1	5	16	$4.80
YRP-14	14″	150	1	5	19	5.30

YCM-15 WEATHERMASTER



Die Cast Magnesium Reflector

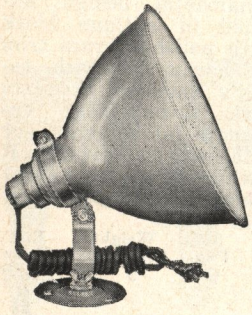
Reflector and neck die cast magnesium in one piece for lifetime service. Arm is ½″ rigid pipe. Porcelain socket factory wired. Sturdy, cast aluminum wall mounting flange with insulating bushings for open wiring. Vibresist gasket to eliminate lamp vibration and lengthen lamp life. Beautiful Lumicote finish. Individually packed. Listed by U.L. and meets REA specifications.

Cat. No.	Diameter	Watts	List Price
YCM-15	14″	150	$6.60

STEBER LIGHTING EQUIPMENT

ECONOMY TYPE FLOODLIGHTS

Open Type 100-300 Watts

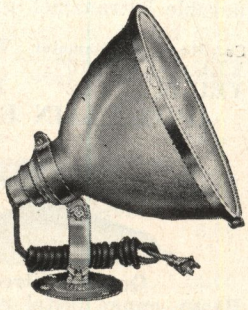


Substantially built, beautifully finished in sparkling Graytone Ultranamel with high reflective interior, assuring maximum light output and distribution. Universal adjustment. Heavy duty base plate for quick and easy installation on any flat surface or directly to 3¼" or 4" outlet box. All metal parts rustproofed. Approved card and plug. Listed by U. L.

Cat. No.	Diameter	Watts	Cart. Quan.	Std. Pkg.	Weight Std. Pkg.	List Price
57	7½"	100	1	6	15	$3.35
59	10½"	200-300	1	6	18	3.85

Enclosed Type 100-200 Watts

These enclosed type weatherproof floodlights are equipped with endless channel rubber gasket and aluminum lens ring providing a permanent weatherproof seal between lens and reflector. Lens easily removed for relamping or cleaning. Same sturdy construction and finish as open types. Listed by U. L.



Cat. No.	Diameter	Watts	Cart. Quan.	Std. Pkg.	Weight Std. Pkg.	List Price
572	7½"	100	1	6	24	$5.25
592	10½"	200	1	6	33	6.00

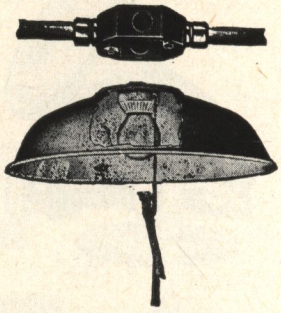
ALUMINUM OPEN AND ENCLOSED 11" FLOODLIGHT — 200-300 Watts



Heavy gauge aluminum reflector and neck spun in one-piece modern streamlined design. Finished in ANODAL to provide reflectivity of highest efficiency and permanent easy to clean surface. No. 801 enclosed type equipped with thermal shock and impact-resistant lens, endless channel gasket and aluminum lens ring. "U" bracket and wing nuts for universal adjustment. Heavy base plate for mounting to any flat surface or directly to 3¼" or 4" outlet box. Factory wired with weatherproof cord set. Listed by U. L.

Cat. No.	Diam.	Watts	Cart. Quan.	Std. Pkg.	Wt. Std. Pkg.	List Price
799 (Open type)	11"	200-300	1	4	10	$6.25
801 (Enclosed type)	11"	200-300	1	4	15	9.25

COVERLITES For OUTLET BOX MOUNTING



Pull Chain

Fits 3¼" or 4"

Outlet Box

Box not Included

Porcelain Socket contained entirely in neck of reflector. Mounting holes punched to fit 3¼" or 4" outlet box. 6" leads for quick installation. Graytone Ultranamel finish, white inside. Listed by U. L.

With Pull Chain Sockets

Cat. No.	Diameter	Watts	List Price
C-112-PC	12"	100	$2.25
C-114-PC	14"	150	2.55
C-116-PC	16"	200	3.50

REFLECTORS WITH SOCKET EXTENSION



Shallow dome reflector equipped with socket extension. Simply screw into any standard lamp receptacle. Finished in Graytone Ultranamel, white inside. Listed by U. L.

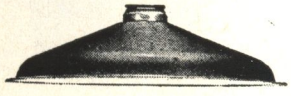
Cat. No.	Diameter	Watts	List Price
C-10-X	10"	60	$1.20
C-12-X	12"	100	1.50

SHALLOW DOME REFLECTORS

Shadeholder Type

Fit Standard

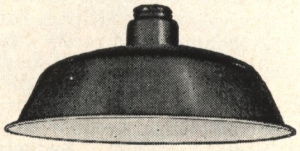
2¼" Shadeholders



Made of heavy gauge drawn steel, finished in Graytone Ultranamel exterior, gleaming white Ultra namel reflecting surface.

Cat. No.	Diameter	Watts	List Price
610	10"	60	$0.80
612	12"	100	.95
614	14"	150	1.25
616	16"	200	1.65

STANDARD DOME REFLECTORS



Shadeholder Type

Fit Standard

2¼" Shadeholders

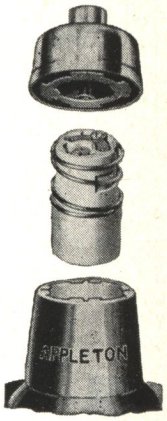
Made of heavy gauge drawn steel, finished in Graytone Ultranamel exterior, gleaming white Ultranamel reflecting surface.

Cat. No.	Diameter	Watts	List Price
812	12"	100	$2.00
814	14"	150	2.50
816	16"	200	3.00

APPLETON ELECTRIC COMPANY

APPLETON LIGHTING EQUIPMENT

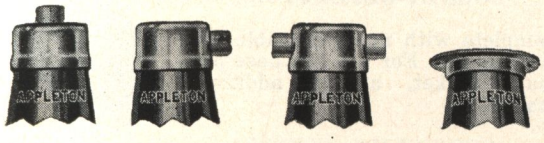
Permanent Porcelain Enamel Finish



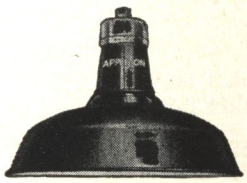
APPLETON SEPRABLE REFLECTORS

Patent No. 2,046,184

Easy to Install — Easy to Service The remarkable ease with which Seprable reflectors may be installed is due to the complete "take-apart" construction of hood, socket and reflector. Simply wire the sockets and with a quarter turn, snap them into the hoods. Reflectors also attach with a quarter turn. No screws are used; there is nothing to loosen or corrode. The resilient socket cushions the lamp against vibration, maintains a firm contact, lengthens lamp life. Standard finish is vitreous fired porcelain enamel, green outside, white inside.



Reflectors with pendant and 4-inch outlet-box hoods are listed below. When specified, right-angle hoods will be supplied at same price. Medium feed-thru hoods at an additional charge. Standard tapping ½ inch or, when specified, ¾ inch.



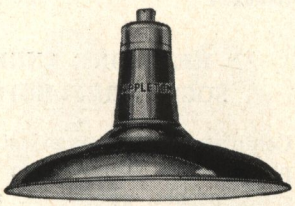
SEPRABLE STANDARD DOME REFLECTORS

Complete with hood and resilient keyless socket. For medium base pull-chain socket, specify at an additional charge.

Pendant Style Cat. No.	Outlet-Box Style Cat. No.	Lamp Size	Diam.	Std. Pkg.
G-52212	G-52512	75-100	12	10
G-52214	G-52514	150	14	10
G-52216	G-52516	200	16	10
G-52218	G-52518	300-500	18	5
G-52220	G-52520	750-1500	20	5

SEPRABLE SHALLOW DOME REFLECTORS

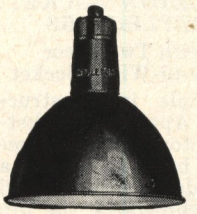
Complete with hood and resilient keyless socket. For medium base pull-chain socket, specify at an additional charge.



Pendant Style Cat. No.	Outlet-Box Style Cat. No.	Lamp Size	Diam.	Std. Pkg.
G-72212	G-72512	75-100	12	10
G-72214	G-72514	150	14	10
G-72216	G-72516	200	16	10
G-72218	G-72518	300-500	18	5

APPLETON LIGHTING EQUIPMENT

Permanent Porcelain Enamel Finish



SEPRABLE BOWL REFLECTORS

Complete with hood and resilient keyless socket. For medium base pull-chain socket, specify at an additional charge.

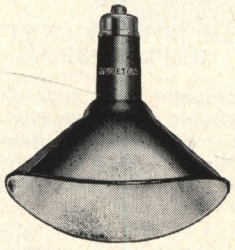
Pendant Style Cat. No.	Outlet-Box Style Cat. No.	Lamp Size	Diam.	Std. Pkg.
G-62208	G-62508	75-100	8	10
G-62210	G-62510	150	10	10
G-62220	G-62520	200	10	10
G-62212	G-62512	300-500	12	5
G-62216	G-62516	750-1500	16	5

SEPRABLE BOWL ANGLE REFLECTORS



Complete with hood and resilient keyless socket. For medium base pull-chain socket, specify at an additional charge.

Pendant Style Cat. No.	Outlet-Box Style Cat. No.	Lamp Size	Diam.	Std. Pkg.
G-92208	G-92508	75-100	8	10
G-92210	G-92510	150	10	10
G-92212	G-92512	200	12	10
G-92214	G-92514	300-500	14	5
G-92216	G-92516	750-1500	16	5



SEPRABLE ELLIPTICAL ANGLE REFLECTORS

Complete with hood and resilient keyless socket. For medium base pull-chain socket, specify at an additional charge.

Pendant Style Cat. No.	Outlet-Box Style Cat. No.	Lamp Size	Std. Pkg.
G-42228	G-42528	75-100	10
G-42229	G-42529	150	10
G-42230	G-42530	200	10

SEPRABLE KEYSTONE ANGLE REFLECTORS



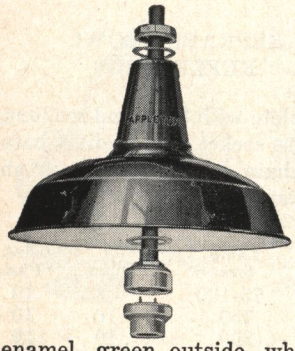
Complete with hood and resilient keyless socket. For medium base pull-chain socket, specify at an additional charge.

Pendant Style Cat. No.	Outlet-Box Style Cat. No.	Lamp Size	Std. Pkg.
G-32228	G-32518	100	10
G-32229	G-32529	150	10
G-32230	G-32530	200	10

APPLETON ELECTRIC COMPANY

APPLETON LIGHTING EQUIPMENT

Permanent Porcelain Enamel Finish



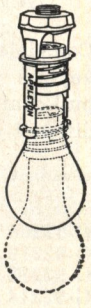
APPLETON SOCKET-REFLECTORS
With Two-Piece Easy-to-Wire Socket

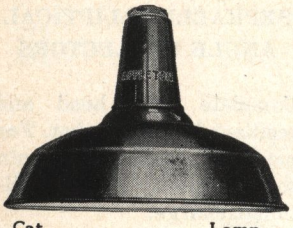
Simple in construction, Appleton Socket-Reflectors are assembled by means of a threaded socket and nut which lock the top of the reflector, between nut and socket casting, on the conduit stem. Standard finish is vitreous fired porcelain enamel, green outside, white inside. For shock-absorbing socket, specify at an additional charge.

APPLETON ADJUSTABLE SOCKET
Patent No. 1,972,056



Frequently, changing conditions in industrial plants require changes in the intensity of illumination. The Appleton Adjustable Socket makes possible many such changes, and frequently spares the need for buying new equipment. This socket may be positioned up or down so that light centers of various sizes of lamps may be correctly used in a given reflector. The Appleton Adjustable Socket also compensates for further changes in bulb sizes. Supplied when specified at same price.





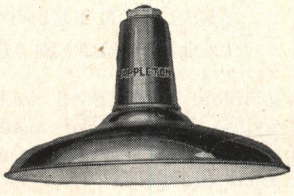
RLM DOME SOCKET-REFLECTORS

Complete with non-adjustable two-piece socket. For medium base pull-chain socket, specify at an additional charge.

Cat. No.	Lamp Size	Diam.	Std. Pkg.
G-50212	75-100	12	10
G-50214	150	14	10
G-50216	200	16	10
G-50218	300-500	18	5
G-50220	750-1500	20	5

SHALLOW DOME SOCKET-REFLECTORS

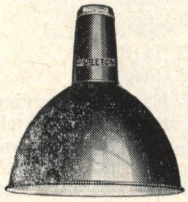
Complete with non-adjustable two-piece socket. For medium base pull-chain socket, specify at an additional charge.



Cat. No.	Lamp Size	Diam.	Std. Pkg.
G-70211	60	12	10
G-70212	100	12	10
G-70214	150	14	10
G-70216	200	16	10
G-70218	500	18	5

APPLETON LIGHTING EQUIPMENT

Permanent Porcelain Enamel Finish

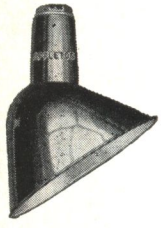


RLM BOWL SOCKET-REFLECTORS

Complete with non-adjustable two-piece socket. For medium base pull-chain socket, specify at an additional charge.

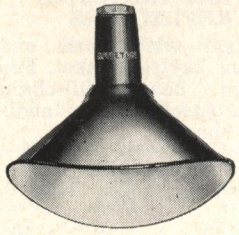
Cat. No.	Lamp Size	Diam.	Std. Pkg.
G-60207	60	7	10
G-60208	75-100	8	10
G-60210	150	10	10
G-60220	200	10	10
G-60212	300-500	12	5
G-60216	750-1500	16	5

RLM ANGLE SOCKET-REFLECTORS



Complete with non-adjustable two-piece socket. For medium base pull-chain socket, at an additional charge.

Cat. No.	Lamp Size	Diam.	Std. Pkg.
G-90208	60	8	10
G-90210	150	10	10
G-90228	75-100	8	10
G-90212	200	12	10
G-90214	300-500	14	5
G-90216	750-1500	16	5
G-90218	750-1500	18	5



ELLIPTICAL ANGLE SOCKET-REFLECTORS

Complete with non-adjustable two-piece socket. For medium base, pull-chain socket, specify at an additional charge.

Cat. No.	Lamp Size	Std. Pkg.
G-40228	100	10
G-40229	150	10
G-40230	200	10
G-40232	300-500	5
G-40234	750-1500	2

KEYSTONE ANGLE SOCKET-REFLECTORS



Complete with non-adjustable two-piece socket. For medium base pull-chain socket, specify at an additional charge.

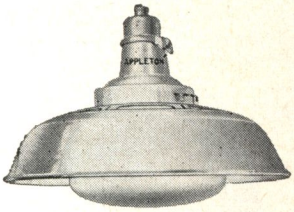
Cat. No.	Lamp Size	Std. Pkg.
G-30228	100	10
G-30229	150	10
G-30230	200	10

APPLETON ELECTRIC COMPANY

APPLETON LIGHTING EQUIPMENT

Permanent Porcelain Enamel Finish

DISKONECT GLASSTEEL DIFFUSERS

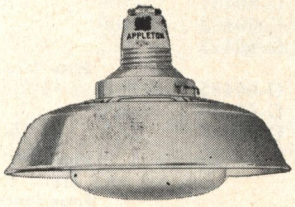


Reflector, lamp and globe may be detached from hood as a unit without disconnecting wires. Standard finish white inside and outside. Standard tapping ½ inch. Will tap ¾ inch when specified.

Pendant Style Cat. No.	Outlet-Box Style Cat. No.	Lamp Size	Diam.	Std. Pkg.
G-23218	G-23518	150-200	18	4
G-23220	G-23520	300-500	20	4
G-23224	G-23524	750-1000	24	2

HEVYDUTY GLASSTEEL DIFFUSERS

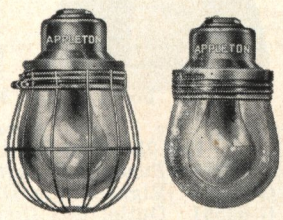
Diffusers attach to porcelain enameled hoods with 3¼ inch diameter threads. Standard finish white inside and outside. Standard tapping ½ inch. Will tap ¾ inch when specified.



Pendant Style Cat. No.	Outlet-Box Style Cat. No.	Lamp Size	Diam.	Std. Pkg.
G-26618	G-26718	100-200	18	4
G-26620	G-26720	300-500	20	4
G-26624	G-26724	750-1000	24	2

DUST-PROOF FIXTURES

Listed by Underwriters' Laboratories for Class II, Group G, Class III and Class IV hazardous locations. Supplied with threaded hood and globe, fixture is dust-proof and moisture-proof. Standard tapping ½ inch.



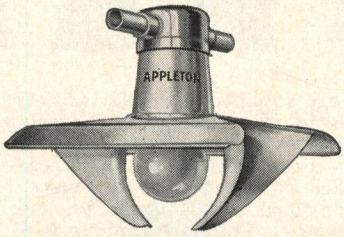
Cat. No.	Style	Lamp Size	Std. Pkg.
G-675	Without Guard	75-100	10
G-685	With Guard	75-100	10

APPLETON LIGHTING EQUIPMENT

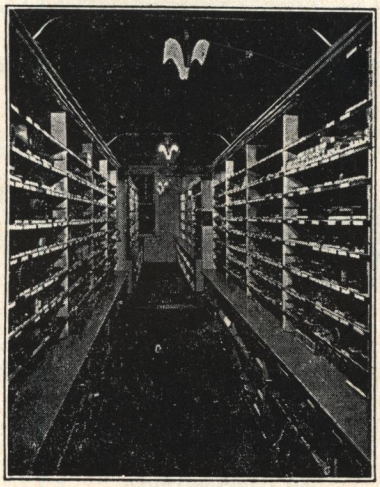
Permanent Porcelain Enamel Finish

STOCKLITES

Patent No. 1,894,227



The Stocklite was developed especially for illumination of shelves and bins in narrow aisles.



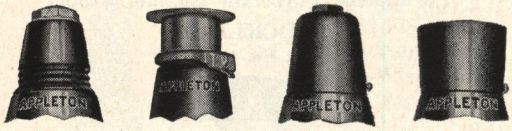
Light is directed to the sides, providing adequate illumination from top to bottom shelves and into bin interiors. Aisle glare is eliminated by the curved V-shaped flanges which also help to build up light intensities where it is needed. The Stocklite improves working conditions and makes possible faster, more accurate handling of orders. Equipped with Seprable hood, the Stocklite is easily attached or detached without the use of tools, and without disturbing the wiring. Standard finish white inside and outside. Fixtures listed below are supplied with keyless sockets. For pull-chain socket specify at an additional charge.

Cat. No.	Lamp Size	Std. Pkg.
With Pendant Hood—Tapped for ½-Inch Conduit		
G-5288	50-60	8
G-5289	75-100	8
G-5290	150	8
G-5291	200	8
With Right-Angle Hood—Tapped for ½-Inch Conduit		
G-5388	50-60	8
G-5389	75-100	8
G-5390	150	8
G-5391	200	8
With Feed-Thru Hood—Tapped for ½-Inch Conduit		
G-5488	50-60	8
G-5489	75-100	8
G-5490	150	8
G-5491	200	8
With Outlet-Box Hood—Fits 4-Inch Standard Outlet-Box		
G-5588	50-60	8
G-5589	75-100	8
G-5590	150	8
G-5591	200	8

APPLETON LIGHTING EQUIPMENT

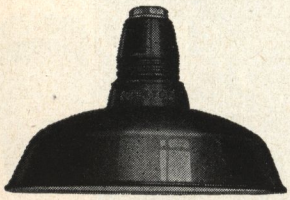
Permanent Porcelain Enamel Finish

APPLETON HEVYDUTY REFLECTORS



Reflectors are supplied with 3¼-in. diameter threads and attach to interchangeable porcelain enameled steel hoods or cast hoods. Standard finish of reflector is vitreous fired porcelain enamel, green outside, white inside. Equipped with two-piece easy-to-wire sockets. For shock-absorbing socket specify and add **$0.10** to list price. Standard tapping is ½ inch. When specified will tap ¾ inch at same price. Porcelain enameled outlet-box hood fits 4 inch and cast outlet box hood fits 3¼ inch or 4 inch standard outlet-box.

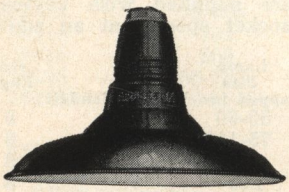
HEVYDUTY RLM DOME REFLECTORS



Complete with two-piece socket. For medium base pull-chain socket, specify at an additional charge.

Pendant Style Cat. No.	Lamp Size	Diam.	Std. Pkg.	Outlet-Box Style Cat. No.
With Porcelain Enameled Hood				
G-56212	100	12	10	G-56512
G-56214	150	14	10	G-56514
G-56216	200	16	10	G-56516
G-56218	300-500	18	5	G-56518
G-56220	750-1500	20	5	G-56520
With Cast Hood				
G-56812	100	12	10	G-56912
G-56814	150	14	10	G-56914
G-56816	200	16	10	G-56916
G-56818	300-500	18	5	G-56918
G-56820	750-1500	20	5	G-56920

HEVYDUTY SHALLOW DOME REFLECTORS



Complete with two-piece socket. For medium base pull-chain socket, specify at an additional charge.

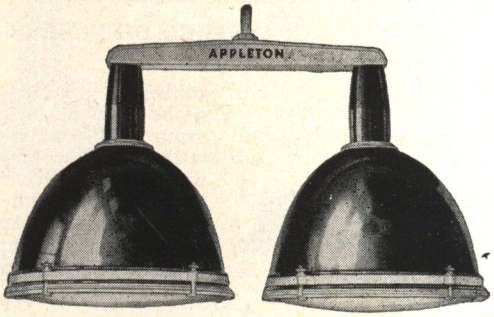
Pendant Style Cat. No.	Lamp Size	Diam.	Std. Pkg.	Outlet-Box Style Cat. No.
With Porcelain Enameled Hood				
G-76212	100	12	10	G-76512
G-76214	150	14	10	G-76514
G-76216	200	16	10	G-76516
G-76218	300-500	18	5	G-76518
With Cast Hood				
G-76812	100	12	10	G-76912
G-76814	150	14	10	G-76914
G-76816	200	16	10	G-76916
G-76818	300-500	18	5	G-76918

APPLETON LIGHTING EQUIPMENT

Permanent Porcelain Enamel Finish

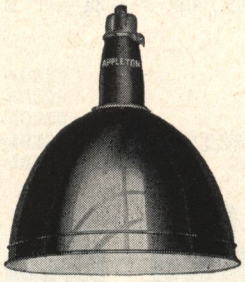
TWIN-HIGHLITE HIGH MOUNTING FIXTURES

For Incandescent and Mercury Lamps



No. G-60481

Cat. No.	Lamp Size Mercury	Lamp Size Incandescent	Diam. of Ref.	Hght. of Fixture	Shpg. Wt. Lbs.
Open Style—Without Glass Cover					
Less Inner Projector					
G-60471	1-400	1-750-1500	18	20¾	28
G-60472	2-400	.....	18	18¼	28
G-60473	....	2-750-1500	18	20¾	28
With Inner Projector					
G-60475	1-400	1-750-1500	18	20¾	29
G-60476	2-400	.....	18	18¼	29
G-60477	....	2-750-1500	18	20¾	29
Enclosed—With Hinged Clear Convex Glass Cover					
Less Inner Projector					
G-60481	1-400	1-750-1500	18	22¼	46
G-60482	2-400	.....	18	19¾	46
G-60483	....	2-750-1500	18	22¼	46
With Inner Projector					
G-60485	1-400	1-750-1500	18	22¼	47
G-60486	2-400	.....	18	19¾	47
G-60487	....	2-750-1500	18	22¼	47
Enclosed Style—With Hinged Clear Flat Impact and Heat Resisting Glass Cover					
Less Inner Projector					
G-60491	1-400	1-750-1500	18	21½	48
G-60492	2-400	.....	18	19	48
G-60493	....	2-750-1500	18	21½	48
With Inner Projector					
G-60495	1-400	1-750-1500	18	21½	49
G-60496	2-400	.....	18	19	49
G-60497	....	2-750-1500	18	21½	49



HIGH MOUNTING PORCELAIN ENAMELED FIXTURES

Designed to produce uniform levels of illumination. Diskonect style permits reflector and lamp to be removed as a unit. Standard tapping ½ inch or, when specified, will tap ¾ inch. Standard finish green outside, white inside.

Cat. No.	Style	Diam.	Std. Pkg.
For 750-1500 Watt Incandescent Lamps			
G-63261	Pendant Diskonect	18	4
G-63361	Right-Angle Diskonect	18	4
G-63561	Outlet-Box Diskonect	18	4
G-60261	Socket-Reflector	18	4
For 400-Watt Mercury Lamps			
G-63281	Pendant Diskonect	18	4
G-63381	Right-Angle Diskonect	18	4
G-63581	Outlet-Box Diskonect	18	4
G-60281	Socket-Reflector	18	4

APPLETON ELECTRIC COMPANY

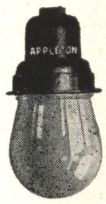
APPLETON VAPOR-PROOF FIXTURES

WITH PENDANT, OR OUTLET-BOX HOOD

National Electrical Code Standard

Appleton Vapor-Proof Fixtures are equipped with cast hold for pendant, or outlet-box mounting, two-piece easy-to-wire socket and heavy threaded clear or diffusing glass globe which screws tightly against the asbestos gasket in the threaded hood. The hood is finished in green. Reflector is green porcelain enamel and attaches securely to the hood.

FIXTURE WITHOUT REFLECTOR



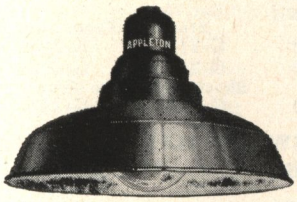
No. G-2200
With Pendant Hood



No. G-2504
With Outlet-Box Hood

With Clear Glass Globe Fixture No.	Lamp Size	Fixture Dia.	Fixture H.	Std. Pkg.	Pkg. Wt.	With Diffusing Glass Globe Fixture No.
Fixture with Pendant Hood						
G2200	60-200	...	11	10	61	G2260
G2500	300-500	...	14⅛	5	56	G2560
Fixture with Outlet-Box Hood						
G2204	60-200	...	10¾	10	69	G2264
G2504	300-500	...	13⅞	5	60	G2564

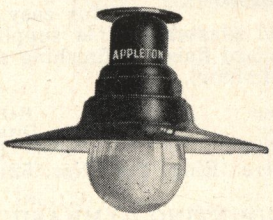
FIXTURE WITH STANDARD DOME REFLECTOR



No. G-57816
With Pendant Hood

With Clear Glass Globe Fixture No.	Lamp Size	Fixture Dia.	Fixture H.	Std. Pkg.	Pkg. Wt.	With Diffusing Glass Globe Fixture No.
Fixture with Pendant Hood						
G57812	60-100	12	9⅞	10	78	G57862
G57814	150	14	10⅛	10	87	G57864
G57816	200	16	11	10	97	G57866
G57818	300-500	18	14⅛	5	81	G57868
Fixture with Outlet-Box Hood						
G57912	60-100	12	9⅝	10	88	G57962
G57914	150	14	9⅞	10	95	G57964
G57916	200	16	10¾	10	105	G57966
G57918	300-500	18	14	5	85	G57968

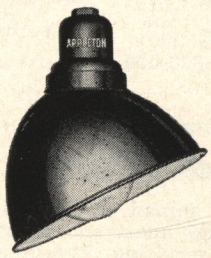
FIXTURE WITH FLAT CONE REFLECTOR



No. G-87916
With Outlet-Box Hood

With Clear Glass Globe Fixture No.	Lamp Size	Fixture Dia.	Fixture H.	Std. Pkg.	Pkg. Wt.	With Diffusing Glass Globe Fixture No.
Fixture with Pendant Hood						
G87814	60-150	14	10	10	77	G87864
G87816	150-200	16	11	10	89	G87866
Fixture with Outlet-Box Hood						
G87914	60-150	14	9¾	10	85	G87964
G87916	150-200	16	10¾	10	96	G87966

FIXTURE WITH ANGLE REFLECTOR



No. G-97812
With Pendant Hood

With Clear Glass Globe Fixture No.	Lamp Size	Fixture Dia	Fixture H.	Std. Pkg.	Pkg. Wt.	With Diffusing Glass Globe Fixture No.
Fixture with Pendant Hood						
G97810	60-150	10	12⅝	10	75	G97860
G97812	150-200	12	13½	10	86	G97862
G97816	300-500	16	19⅛	5	77	G97866
Fixture with Outlet-Box Hood						
G97910	60-150	10	12⅝	10	83	G97960
G97912	150-200	12	13¼	10	94	G97962
G97916	300-500	16	18¾	5	81	G97966

VAPORPROOF GLOBES



No. G-1200

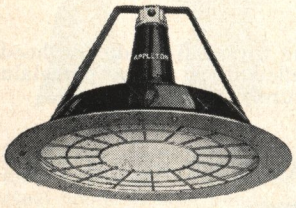
Cat. No.	Lamp Size	Dia. Thread	Dia. Globe	Hght. In.	Pkg. Wt.	Std. Pkg.
Clear Type Vaporproof Globes						
G1200	60-200	4⅛	5¼	6⅞	23	10
G1500	300-500	5½	8¼	8½	47	10
Diffusing Type Vaporproof Globes						
G1203	60-200	4⅛	5¼	6⅞	23	10
G1503	300-500	5½	8¼	8½	47	10

APPLETON ELECTRIC COMPANY

APPLETON LIGHTING EQUIPMENT

Permanent Porcelain Enamel Finish

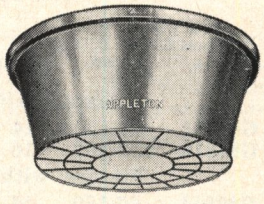
FLUSH MOUNTING GYMNASIUM FIXTURES



Fixture is designed for installation and servicing from below. Equipped with Standard Dome Reflector. As the fixture is mounted flush, the ceiling is free from obstruction. Center opening in guard allows for easy lamp replacement. No. 511 plaster ring is supplied only when ordered. Standard finish of finishing ring and guard is sprayed aluminum.

Cat. No.	Lamp Size	Ref. Diam.	Std. Pkg.
G-5218	300-500	18	1
G- 511	Plaster Ring for No. 5218		1

SURFACE MOUNTING GYMNASIUM FIXTURES



Sturdily constructed to withstand shocks and jars. Equipped with RLM Dome Reflector. Conical housing is made from heavy gauge steel, and independently mounted to afford maximum protection for reflector and lamp. Guard has center opening for easy lamp replacement. Standard finish of housing and wire guard is buff paint enamel.

Cat. No.	Lamp Size	Ref. Diam.	Std. Pkg.
G-5410	200	16	1
G-5411	300-500	18	1

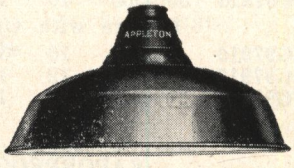


YARD LIGHTS

Provides a wide spread of diffused light. Separable reflector with take-apart construction permits easy installation and servicing. Reflector is porcelain enameled, green outside, white inside. Hood, stem, wall flange and lag screws are cadmium plated.

Cat. No.	Diam.	Overall Length	Std. Pkg.
G-7232	12	26	5
G-7234	14	27	5

RLM DOME SHADEHOLDER REFLECTORS



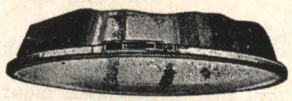
Reflectors listed below are supplied with neck for mounting on standard 2¼ inch shadeholder. When specified, reflectors will be supplied with shadeholders for brass-shell sockets or porcelain sockets at an additional charge. Reflectors are porcelain enamel, green outside, white inside.

Cat. No.	Lamp Size	Diam.	Std. Pkg.
G-55010	25-40	10	10
G-55012	75-100	12	10
G-55014	150	14	10
G-55016	200	16	10

APPLETON LIGHTING EQUIPMENT

Permanent Porcelain Enamel Finish

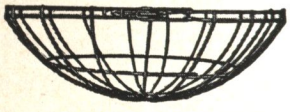
GLASTITE PROTECTORS



Protects reflectors and other lighting equipment against smoke fumes and dirt. Equipped with adjustable clamp to provide easy attachment or removal. Consists of a convex glass disc, a channel gasket and an aluminum band.

Cat. No.	Diam.	Std. Pkg.	Cat. No.	Diam.	Std. Pkg.
G-1348	8	5	G-1356	16	5
G-1350	10	5	G-1358	18	5
G-1352	12	5	G-1360	20	5
G-1354	14	5	G-1364	24	5

WIRE GUARDS



Made of heavy steel wire electrically welded and bright tinned after welding. Adjustable clamps permits easy attachment or removal.

Diam. In.	Shallow Style Cat. No.	Shallow Style Hght. In.	Shallow Style Std. Pkg.	Deep Style Cat. No.	Deep Style Hght. In.	Deep Style Std. Pkg.
10	.....	...	..	G-1310	3	10
12	G-1112	1½	10	G-1312	3⅞	10
14	G-1114	1¾	10	G-1314	5	10
16	G-1116	1⅞	10	G-1316	5¼	10
18	G-1118	2⅛	10	G-1318	5¼	10
20	G-1120	2½	10	G-1320	5¾	10
24	.....	...	..	G-1324	5¾	10



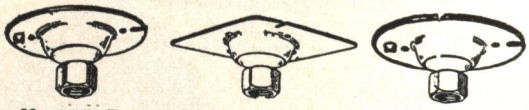
CANOPY ALIGNERS

Aligners are non-twisting and permit self-alignment of reflectors and fixtures allowing them to hang vertically regardless of position of outlet-box. Supplied with strap for mounting on 3¼ or 4 inch standard outlet-box.

Tapping	Std. Pkg.	Porcelain Finish White Cat. No.	Porcelain Finish Green Cat. No.	Cadmium Finish Cat. No.
		Standard Type		
½	10	G-2141	G-2151	G-2131
¾	10	G-2142	G-2152	G-2132
		Shock-Absorbing Type		
½	10	G-2143	G-2153	G-2133

SWIVEL HANGER COVERS

Ball Type—Without Cushion



No. 8438-R No. 8458-R No. 8448-R

Swivel hanger covers are of a new simplified design with a free swing of 30 degrees in all directions from plumb. Galvanized.

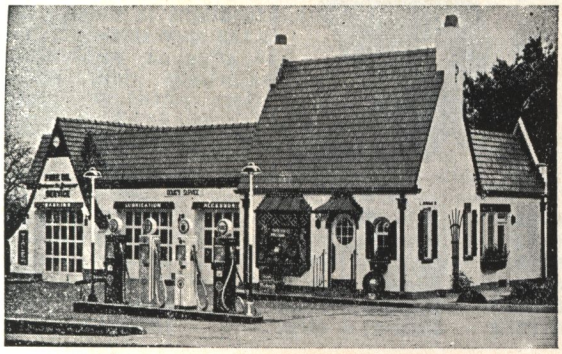
Cat. No.	Size Hub Inches	Std. Pkg.	Wt. Lbs. Per 100	Price Schedule
	For 3¾ and 4-inch Octagonal Outlet Boxes			
8438-R	½	100	58	"OB"
8436-R	¾	100	60	"OB"
	For 4-inch Square Outlet Boxes			
8458-R	½	100	67	"OB"
8459-R	¾	100	69	"OB"
	For 4½-inch Diameter Concrete Rings			
8448-R	½	100	61	"OB"
8449-R	¾	100	63	"OB"

APPLETON ELECTRIC COMPANY

APPLETON LIGHTING EQUIPMENT

Permanent Porcelain Enamel Finish

LIGHTING EQUIPMENT FOR GASOLINE SERVICE STATIONS



Good illumination serves to attract the attention of passing trade by making the station stand out as a landmark in the darkness to signal the night driver in plenty of time to stop. Well lighted grounds indicate the alert, intelligent service that motorists demand. Nation wide studies among service stations have demonstrated that modern lighting will at least double the night gallonage for the average station. Good illumination sells gasoline and promotes patronage the year around. Appleton lighting equipment offers a suitable style of Floodlight and Standlite for every requirement of the modern gasoline service station.

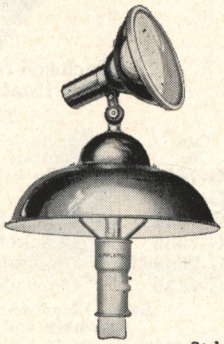


DIRECT STANDLITES

Produces a wide spread of diffused light from its low mounting height of 10 to 12 feet. The diffusing qualities of its porcelain enamel finish evenly distributes the light to secure uniform high intensity. Standard finish green outside, white inside. Supplied with hood for mounting on 2-inch pole.

Cat. No.	Lamp Size	Diam.	Std. Pkg.
G- 57	200	20	1
G- 77	300-500	20	1
G-775	750-1500	24	1

COMBINATION STANDLITE



Combines the Direct Standlite with a close mounting floodlight for effective lighting of pump islands and buildings. Floodlight is adjustable for vertical and lateral positioning and is supplied with watertight glass lens. All wiring is concealed. Standard finish green outside, white inside. Standlite mounts on 2-inch pipe.

Cat. No.	Lamp Sizes Standlite	Lamp Sizes Floodlight	Std. Pkg.
G-7722	200	200	1
G-7725	200	300–500	1
G-7752	300–500	200	1
G-7755	300–500	300–500	1

APPLETON LIGHTING EQUIPMENT

Permanent Porcelain Enamel Finish

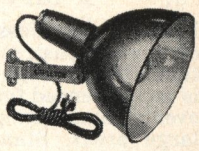
PORTABLE OUTDOOR FLOODLIGHTS



Supplied with watertight glass lens. Floodlight is entirely weatherproof. Completely adjustable for vertical and horizontal positioning. Equipment with 8 feet of rubber duplex cord with attachment plug.

Cat. No.	Lamp Size	Diam.	Std. Pkg.
G-6	100-150	8	1
G-7	200	10	1
G-5	300–500	10	1

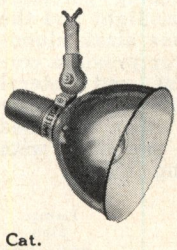
FLEXOLITE WITH BRACKET ARM



An economical porcelain enameled weatherproof floodlight, supplied with bracket arm and mounting plate. Provides universal adjustment for horizontal and vertical positioning. Supplied with 8 feet of duplex rubber covered cord with plug. *300-watt medium base.

Cat. No.	Lamp Size	Diam.	Std. Pkg.
G-1372	100	8	1
G-1374	200–300*	10	1

FLEXOLITE WITH PIPE BRACKET



An economical porcelain enameled weatherproof floodlight designed for mounting on ½ inch conduit or, when specified, ¾ inch. Designed for concealed wiring. *300-watt medium base.

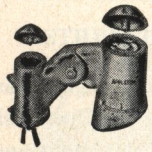
Cat. No.	Lamp Size	Diam.	Std Pkg.
G-1382	100	8	1
G-1384	200–300*	10	1

* 300 watt medium base.

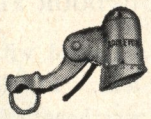
APPLETON LIGHTING EQUIPMENT

Permanent Porcelain Enamel Finish

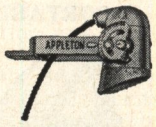
FLOODLIGHTS WITH POLE, BRACKET AND CROSSARM MOUNTING HOODS



Pole Mounting



Bracket Mounting

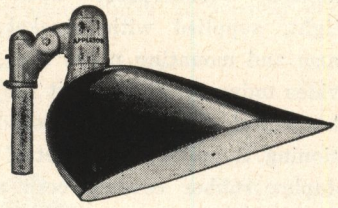


Crossarm Mounting

Floodlights are finished in vitreous fired porcelain enamel which is easily cleaned to retain its original high efficiency. Equipped with cast ventilated hood which allows floodlight to be completely removed from the hood without disturbing the wiring. During installation and wiring, only the hood is handled instead of the heavier complete unit. Hoods provide for complete vertical and lateral positioning. Pole mounting hoods are concealed wiring style for mounting on 2-inch pipe or, when specified, on 1½-inch pipe. Bracket mounting hoods are open wiring style and may be clamped on 1-inch to 2-inch iron pipe or attached to wooden crossarm or other flat surface, and are furnished with threaded wire entrance bushing which may be replaced with BX connector. Crossarm mouting hood is open-wiring style. May be attached to any flat surface. Allows for vertical and lateral positioning. Automatic stop assures the reflector being returned to its exact original position.

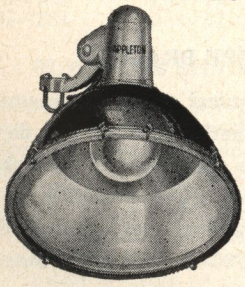
DIFFUSO FLOODLIGHTS

Large, seamless, one-piece construction. This floodlight is recommended for evenly illuminating large areas. Standard finish, green outside, white inside.



Cat. No.	Style	Lamp Size	Std. Pkg.
G-95	Pole Mtg.	300-500	1
G-90	Pole Mtg.	750-1500	1
G-96	Bracket Mtg.	300-500	1
G-91	Bracket Mtg.	750-1500	1
G-97	Crossarm Mtg.	300-500	1
G-92	Crossarm Mtg.	750-1500	1

SPORTO FLOODLIGHTS



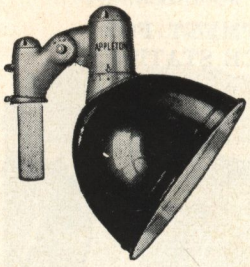
Designed for outdoor recreational areas, the combination of diffusing porcelain enameled floodlight and the more specular alzak aluminum projector provides correct vertical and lateral distribution for both nearby and distant areas. Enclosed floodlights supplied with heat resisting lens.

Cat. No.	Style	Lamp Size
G-8524	Pole Mtg.—Open	750-1500
G-8624	Pole Mtg.—Enclosed	750-1500
G-8534	Bracket Mtg.—Open	750-1500
G-8634	Bracket Mtg.—Enclosed	750-1500
G-8544	Crossarm Mtg.—Open	750-1500
G-8644	Crossarm Mtg.—Enclosed	750-1500

APPLETON LIGHTING EQUIPMENT

Permanent Porcelain Enamel Finish

REFLECTO FLOODLIGHTS

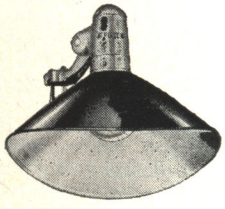


Designed for service where a given area or structure is to be uniformly illuminated to a high intensity. Floodlight is listed below in the open style only. Can be supplied with hinged watertight glass lens at prices quoted on request. Standard finish, green outside, white inside.

Cat. No.	Style	Lamp Size	Std. Pkg.
G-85	Pole Mtg.	300-500	1
G-80	Pole Mtg.	750-1500	1
G-87	Bracket Mtg.	300-500	1
G-83	Bracket Mtg.	750-1500	1
G-8742	Crossarm Mtg.	300-500	1
G-8744	Crossarm Mtg.	750-1500	1

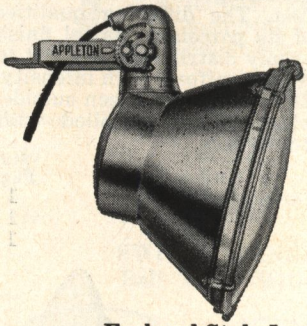
ELIPSO FLOODLIGHTS

Particularly adapted to the illumination of areas where a wide lateral distribution of light is required. Standard finish, green outside, white inside.



Cat. No.	Style	Lamp Size	Std. Pkg.
G-4522	Pole Mtg.	300-500	1
G-4524	Pole Mtg.	750-1500	1
G-4532	Bracket Mtg.	300-500	1
G-4534	Bracket Mtg.	750-1500	1
G-4542	Crossarm Mtg.	300-500	1
G-4544	Crossarm Mtg.	750-1500	1

LUMO ALUMINUM FLOODLIGHTS



Designed for general purpose floodlighting of areas requiring a more concentrated distribution of light. Floodlight is listed below with hinged watertight glass lens. For open style, without glass cover, specify and deduct $18.00 list. Standard finish is alzak aluminum.

Enclosed Style Lumo Floodlights With Heat Resisting Glass Lens

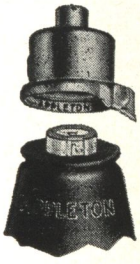
750-1500 Watt

Cat. No.	Style Mounting	Beam Spread	Std. Pkg.	Pkg. Wt.
G-7624	Pole	Narrow	1	24
G-7625	Pole	Medium	1	24
G-7634	Bracket	Narrow	1	24
G-7635	Bracket	Medium	1	24
G-7644	Crossarm	Narrow	1	24
G-7645	Crossarm	Medium	1	24
	Lumo Floodlights with Cast Aluminum Cover Assembly and Heat Resisting Glass Lens			
G-7624C	Pole	Narrow	1	27
G-7625C	Pole	Medium	1	27
G-7634C	Bracket	Narrow	1	27
G-7635C	Bracket	Medium	1	27
G-7644C	Crossarm	Narrow	1	27
G-7645C	Crossarm	Medium	1	27

APPLETON ELECTRIC COMPANY

APPLETON LIGHTING EQUIPMENT

Permanent Porcelain Enamel Finish

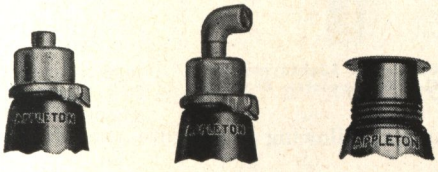


APPLETON DISKONECT REFLECTORS

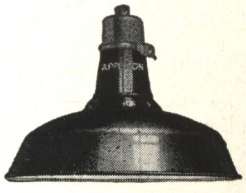
Patent No. 1,933,385

Reflector and lamp removable as a unit. Designed for easier installation and easier service.

Diskonect construction permits the reflector and lamp to be detached from the hood as a unit without disconnecting the wires. The socket may be removed from the reflector by a quarter turn leaving the reflector free of all electrical parts for quick cleaning. Metal to glass contact permits easy removal regardless of years of service. Hoods are supplied with universal terminal base and are interchangeable with all medium or mogul base Diskonect reflectors. Standard finish is vitreous fired porcelain enamel, green outside, white inside.



Reflectors with pendant and outlet-box hoods are listed below. When specified right-angle hoods will be supplied at the same price. Standard tapping is ½ inch. When specified will tap ¾ inch at same price. Outlet-box hoods fit standard 4-inch outlet-box.



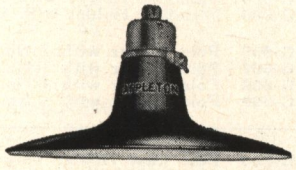
DISKONECT RLM DOME REFLECTORS

Complete with hood and resilient keyless socket.

Pendant Style Cat. No.	Outlet-Box Style Cat. No.	Lamp Size	Diam.	Std. Pkg.
G-53212	G-53512	75-100	12	10
G-53214	G-53514	150	14	10
G-53216	G-53516	200	16	10
G-53218	G-53518	300-500	18	5
G-53220	G-53520	750-1500	20	5

DISKONECT SHALLOW DOME REFLECTORS

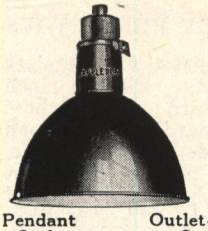
Complete with hood and resilient keyless socket.



Pendant Style Cat. No.	Outlet-Box Style Cat. No.	Lamp Size	Diam.	Std. Pkg.
G-73212	G-73512	100	12	10
G-73214	G-73514	150	14	10
G-73216	G-73516	200	16	10
G-73218	G-73518	300-500	18	5

APPLETON LIGHTING EQUIPMENT

Permanent Porcelain Enamel Finish



DISKONECT RLM BOWL REFLECTORS

Complete with hood and resilient keyless socket.

Pendant Style Cat. No.	Outlet-Box Style Cat. No.	Lamp Size	Diam.	Std. Pkg.
G-63207	G-63507	60	7	10
G-63208	G-63508	75-100	8	10
G-63210	G-63510	150	10	10
G-63220	G-63520	200	10	10
G-63212	G-63512	300-500	12	5
G-63216	G-63516	750-1500	16	5

DISKONECT RLM ANGLE REFLECTORS

Complete with hood and resilient keyless socket.



Pendant Style Cat. No.	Outlet-Box Style Cat. No.	Lamp Size	Diam.	Std. Pkg.
G-93208	G-93508	60	8	10
G-93228	G-93528	75-100	8	10
G-93210	G-93510	150	10	10
G-93212	G-93512	200	12	10
G-93214	G-93514	300-500	14	5
G-93216	G-93516	750-1500	16	5



DISKONECT ELLIPTICAL ANGLE REFLECTORS

Complete with hood and resilient keyless socket.

Pendant Style Cat. No.	Outlet-Box Style Cat. No.	Lamp Size	Std. Pkg.
G-43228	G-43528	100	10
G-43229	G-43529	150	10
G-43230	G-43530	200	10
G-43232	G-43532	300-500	5
G-43234	G-43534	750-1500	2

DISKONECT KEYSTONE ANGLE REFLECTORS

Complete with hood and resilient keyless socket.



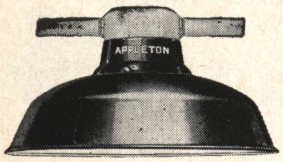
Pendant Style Cat. No.	Outlet-Box Style Cat. No.	Lamp Size	Std. Pkg.
G-33228	G-33528	100	10
G-33229	G-33529	150	10
G-33230	G-33530	200	10

APPLETON ELECTRIC COMPANY

APPLETON LIGHTING EQUIPMENT

Permanent Porcelain Enamel Finish

STANDARD DOME OUTLET-BOX REFLECTORS

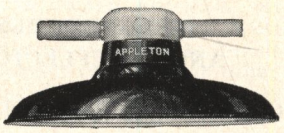


Complete with keyless socket. Fits 4 inch standard outlet-box. Standard finish, green outside, white inside. For pull-chain socket specify at an additional charge.

Cat. No.	Lamp Size	Diam.	Std. Pkg.
G-54512	60-100	12	10
G-54514	150	14	10
G-54516	200	16	10

SHALLOW DOME OUTLET-BOX REFLECTORS

Complete with keyless socket. Fits 4 inch standard outlet-box. Standard finish, green outside, white inside. For pull-chain socket specify at an additional charge.



Cat. No.	Lamp Size	Diam.	Std. Pkg.
G-74510	25-60	10	10
G-74512	60-100	12	10
G-74514	150	14	10
G-74516	200	16	10

KEYSTONE SIGN REFLECTORS



The Keystone Reflector is designed for the illumination of square or rectangular signs, and distributes the light over the entire surface of the sign without overlapping at the corners or edges. Standard finish, green outside, white inside. Standard tapping is ½ inch, ¾ inch when specified.

Cat. No.	Lamp Size	Std. Pkg.
G-940	40-60	10
G-941	100	10
G-945	150	10

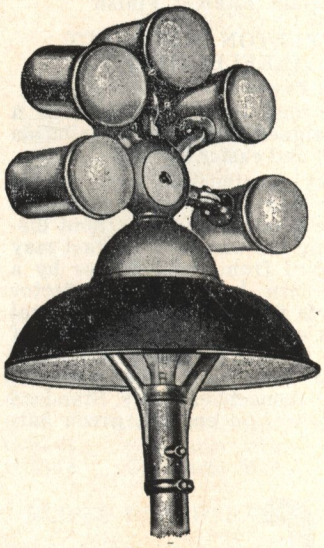
ROUND SIGN REFLECTORS

The Round Reflector is designed for the illumination of circular signs or signs without square corners. The duo-bowl reflector with its greater reflecting surface has a correspondingly greater efficiency than most similar reflectors. Standard finish, green outside, white inside. Standard tapping is ½ inch, ¾ inch when specified.

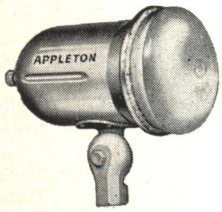


Cat. No.	Lamp Size	Std. Pkg.
G-907	40-60	10
G-908	100	10
G-910	150	10

APPLETON GROUP LIGHTS



No. G-605 Group Lights mounted on No. G-7750 Appleton Standlite



No. G-601 Group Light

Appleton Group Lights consists of cast aluminum holder and 2, 3, 4 or 5 No. G-601 lights. Constructed to mount on top of Appleton No. G-7750 Standlite, the holder is made to accommodate from 2 to 5 lights. When less than five lights are used, the balance of the holes are plugged, allowing for future use of additional lights.

No. G-601 consists of Alzak Aluminum housing with medium base adjustable socket permitting the use of the following lamps: PAR-38 150 watt spot or flood, R-40 150 or 300 watt spot or flood.

No. G-701 is the same as No. G-601 except that housing is slightly larger and is supplied with a mogul adjustable socket permitting the use of 300 watt or 500 watt R-40 Radiant Hi-Flood lamps.

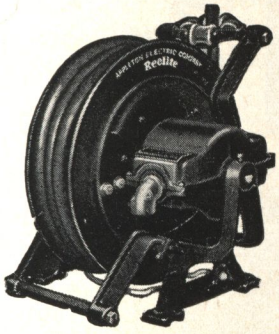
Cat. No.	Socket	For Use With Lamps	Wattage
G-601	Medium	PAR-38 or R-40	150-300
G-701	Mogul	R-40 Radiant Hi-Flood	300-500

STANDLITE AND POLE HOLDERS

Cat. No.	Description
G-600	Standlite Cast Holder only
G-602	Standlite Holder with 2 No. G-601 lights
G-603	Standlite Holder with 3 No. G-601 lights
G-604	Standlite Holder with 4 No. G-601 lights
G-605	Standlite Holder with 5 No. G-601 lights
G-606	Pole Holder with 2 No. G-601 lights
G-607	Pole Holder with 3 No. G-601 lights
G-608	Pole Holder with 4 No. G-601 lights
G-609	Pole Holder with 5 No. G-601 lights
G-700	Pole Cast Holder only
G-702	Standlite Holder with 2 No. G-701 lights
G-703	Standlite Holder with 3 No. G-701 lights
G-704	Standlite Holder with 4 No. G-701 lights
G-705	Standlite Holder with 5 No. G-701 lights
G-706	Pole Holder with 2 No. G-701 lights
G-707	Pole Holder with 3 No. G-701 lights
G-708	Pole Holder with 4 No. G-701 lights
G-709	Pole Holder with 5 No. G-701 lights

CONSTANT DUTY REELITE

SPRING-DRIVEN CABLE LIFT REEL



TYPE "A" REELITE

When ordering, specify—catalog number of Reelite; length, gauge and number of conductors of cable; type of cable outlet desired.

Material is cast ferrous construction. Black enameled finish.

Type "A" 3 Spring—
35 Amp., 440 Volts AC. 250 Volts, D.C.

Cat. No.	Wt. of Reelite Only	No. of Conductors	Max. Capacity, in Feet, of Various Sizes and Conductors of Cable No.18	No.16	No.14	No.12	No.10
CD-A23	36 lbs.	2	55	55	50	35	..
CD-A33	37 lbs.	3	55	55	45	35	..
CD-A43	38 lbs.	4	55	55	35	30	..
CD-A53	43 lbs.	5	50	50	30	20	..
CD-A63	44 lbs.	6	45	40	20	20	..

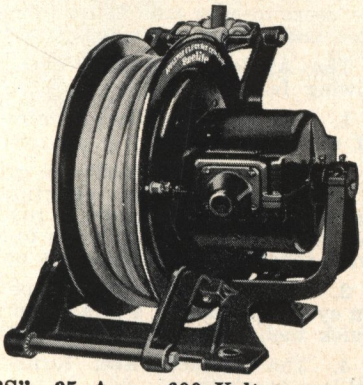
Type "A" 5 Spring—
35 Amp., 440 Volts AC. 250 Volts, D.C.

CD-A25	40 lbs.	2	100	90	55	..	..
CD-A35	41 lbs.	3	90	75	50	..	..
CD-A45	42 lbs.	4	75	60	..	..	..
CD-A55	47 lbs.	5	60	55	..	..	..
CD-A65	48 lbs.	6	50	50	..	..	..

REELITES FOR TYPE "S" CORDS

When ordering, specify — catalog number of Reelite; length, gauge and number of conductors of cable; type of cable outlet desired.

Material is cast aluminum, and steel. Black enameled finish.



Type "BS"—35 Amp., 600 Volts

Cat. No.	Wt. of Reelite Only	No. of Conductors	Max. Capacity, in Feet, of Various Sizes and Conductors of Cable No.18	No.16	No.14	No.12	No.10
CD-BS22	124 lbs.	2	..	..	60	60	55
CD-BS32	126 lbs.	3	..	..	60	60	55
CD-BS42	128 lbs.	4	..	65	60	50	50
CD-BS52	154 lbs.	5	65	65	55	50	45
CD-BS62	156 lbs.	6	65	65	55	50	40
CD-BS72	158 lbs.	7	65	65	55	50	40
CD-BS82	160 lbs.	8	60	55	40	35	30

Type "CS"—35 Amp., 600 Volts

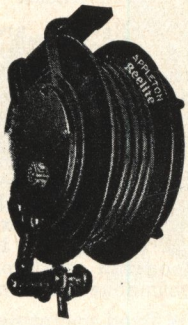
CD-CS24	154 lbs.	2	110	110	105	90	85
CD-CS34	156 lbs.	3	110	110	100	85	70
CD-CS44	158 lbs.	4	110	110	90	75	60
CD-CS54	184 lbs.	5	110	100	75	65	55
CD-CS64	186 lbs.	6	100	100	65	55	45
CD-CS74	188 lbs.	7	100	100	65	55	45
CD-CS84	190 lbs.	8	85	80	45	40	35

RATCHET—For installations where constant tension is not desired, a gravity-type ratchet may be furnished at extra charge. See Schedule "CD." Orders must specify mounting position of Reelite base.

CONSTANT DUTY REELITE

FOR TYPE "SJ" CORD

Rating—20 Amperes, 300 Volts



This Reelite has been especially developed for Type "SJ," 2 and 3-conductor cords. The roller outlet with which it is equipped permits either ceiling, wall, or base mounting. For installation where constant tension is not desired, a gravity-type ratchet may be furnished at extra charge. Furnished with 25 feet of "SJ" cord.

Cat. No.	No. of Cond.	Capacity in Feet No.18	No.16	Wt. Lbs. Each
CD-SR21	2	25	25	12
CD-SR31	3	25	25	12

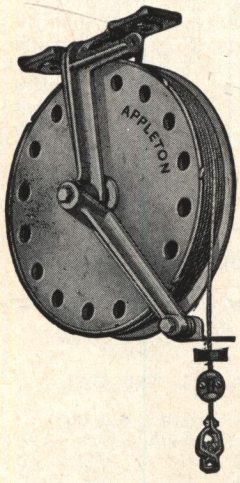
Schedule "RE" Discounts

APPLETON GROUNDING REELS

FOR STATIC DISCHARGE AND SAFETY GROUNDING

During Refueling Operations

TYPE "SD" STATIC REEL



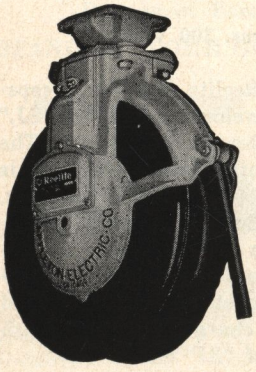
The Type "SD" Static Discharge Reel is an all-cast reel assembly furnished complete with $\frac{3}{32}$-inch flexible aviation control cable, rubber bumper, cable clamp, and a Universal spring jaw battery clip. An adjustable outlet permits pendant, wall, or upright mounting. Reel is finished in natural metallic to permit positive grounding at all points of contact.

Ratchet — For installations where constant tension is not desired, a gravity-type ratchet may be furnished at extra charge. Orders must specify mounting position of Reelite base.

Cat. No.	Cable Length Feet	Dimens., Inches Diameter	Overall Width	Shpg. Wt. Lbs.
CD-SD1	40	13½	5⅞	24
CD-SD2	80	13½	6¾	32

APPLETON TYPE "YS" REELITE

PORTABLE POWER FOR ELECTRIC HOISTS

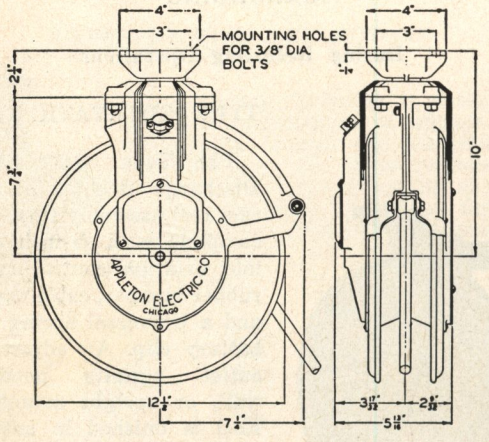


An automatic take-up, spring-operated cable reel designed principally to furnish power to traveling electric hoists operating on straight or curved tracks.

Type "YS" Reelites are furnished complete with swivel base and Type S cord assemblies. Cord assemblies have skinned leads with solderless lugs directly connected to terminal block on reel drum side. Swivel base has cast stop lug which limits rotation to approximately 335 degrees. It is not recommended for endless monorail systems which require collector rings for continuous rotation.

As reel swivels with respect to its fixed mounting, a looped, flexible rubber cord should be used to supply current to the brushes. When hoist is mounted on an ungrounded support, an extra conductor must be supplied to maintain the safety grounding circuit. For single phase systems, a 3-conductor reel should be used; for three phase systems, a 4-conductor reel should be used. The grounding shunt regularly furnished may be discarded only when hoist is operating on a grounded monorail track. In this case, no extra conductor is necessary.

Dimensions in Inches



Type "YS" Cord Reel

Furnished complete with swivel base and maximum length of Type S cord.

10 Amps., 550 A.C., 250 D.C.

Wire Gauge No.	Conduc. tors	Cat. No.	Cord Length	Net Wt. Lbs.
	2	RE-YS162-45	45′	23
16	3	RE-YS163-45	45′	24
	4	RE-YS164-40	40′	25

15 Amp., 550 A.C., 250 D.C.

	2	RE-YS142-40	40′	25
14	3	RE-YS143-35	35′	25
	4	RE-YS144-25	25′	25

Finish: Two-tone baked enamel.

APPLETON RETRACT-O-REEL



This Retract-o-Reel balancer has been designed and developed at the request of many users of the Appleton Reelites — many of whom were dissatisfied with other available balancers.

The field for application of small tool balancers is tremendous — ranging from small shops having an application for one to a dozen, to those larger industrials using portable tools by the hundreds. The application of the Appleton Retract-o-Reel is definitely a practical suggestion of means to enable its users to save man hours by speeding up production and cutting down tool maintenance costs.

The Appleton Retract-o-Reel embodies the following features:

1. The Retract-o-Reel is streamlined and made of cast aluminum.

2. The newly designed wire grip stopper employs a wedge type principle of gripping which insures extra long life for the wire rope while assuring a positive grip — no set screws to injure or break the wire rope even with constant operation.

3. The end of the wire rope is furnished with an eye loop made of a swaged-in thimble permitting quick tool connection.

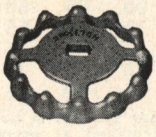
4. The Retract-o-Reel turns on self-lubricated oil-less bearings.

Furnished with 6 feet, preformed wire rope, rubber bumper, cable clamp, and swaged in thimble-eye loop.

Cat. No.	Weight of Tool To Be Balanced in Lbs. Max.	Min.	Active Rope Max. Working Range in Ft.	Inactive Rope Min. Lgth. in Ft. Outside Reel Drum
RE-B21-010	10	0	6	0

Net weight each, 6 lbs.

RETRACT-O-REEL HAND WHEEL



Hand wheel fits tension adjustment stud on Retract-o-Reel. It affords safe and quick spring tension adjustment for proper balance especially after reel servicing. Net weight each, 8 oz.

No. RE-A1-B21 Retract-o-Reel; Hand Wheel.

CONSTANT DUTY REELITES

SPRING-DRIVEN CABLE LIFT REEL REELITES FOR TYPE "S" CORDS (Continued)

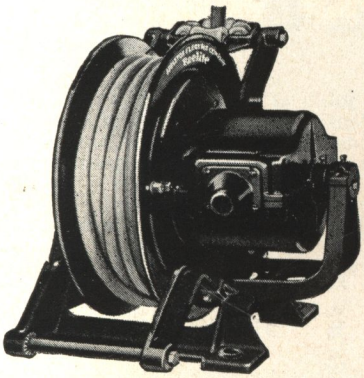
Type "DS"—35 Amp., 600 Volts

Cat. No.	Wt. of Reelite Only	No. of Conductors	Max. Capacity, in Feet, of Various Sizes and Conductors of Cable No.18	No.16	No.14	No.12	No.10
CD-DS32	214 lbs.	3	...	...	..	..	80
CD-DS42	216 lbs.	4	...	...	..	80	75
CD-DS52	240 lbs.	5	...	...	80	75	70
CD-DS62	242 lbs.	6	...	...	80	75	65
CD-DS72	244 lbs.	7	...	...	75	70	65
CD-DS82	246 lbs.	8	...	...	65	65	50

Type "ES"—35 Amp., 600 Volts

CD-ES24	272 lbs.	2	150	150	140	135	130
CD-ES34	274 lbs.	3	150	150	140	135	125
CD-ES44	276 lbs.	4	150	150	130	130	105
CD-ES54	300 lbs.	5	150	150	130	110	90
CD-ES64	302 lbs.	6	150	140	110	95	80
CD-ES74	304 lbs.	7	150	140	110	90	70
CD-ES84	306 lbs.	8	130	130	85	70	55

REELITES FOR TYPE "W" CABLES



When ordering be sure to specify catalog number of Reelite; length, gauge and number of conductors of cable; and type of cable outlet required.

Material is cast aluminum and steel. Black enameled finish.

Type "BW"—100 Amp., 600 Volts

Cat. No.	Wt. of Reelite Only	No. of Conductors	Max. Capacity, in Feet of Various Sizes and Conductors of Cable No.8	No.6	No.4	No.3	No.2	No.1
CD-BW12	122 lbs.	1	60	60	55	..	..	..
CD-BW22	124 lbs.	2	45	35	20	..	..	..
CD-BW32	126 lbs.	3	40	30	20	..	..	..
CD-BW42	128 lbs.	4	30	25	15	..	..	..

Type "CW"—100 Amp., 600 Volts

CD-CW14	152 lbs.	1	100	100	85	..	..	..
CD-CW24	154 lbs.	2	55	40	25	..	..	..

Type "DW"—100 Amp., 600 Volts

CD-DW12	210 lbs.	1	..	..	..	75	65	60
CD-DW22	212 lbs.	2	75	65	45	35	30	25
CD-DW32	214 lbs.	3	65	50	35	30	25	20
CD-DW42	216 lbs.	4	50	40	25	20	20	15

Type "EW"—100 Amp., 600 Volts

CD-EW14	270 lbs.	1	140	135	120	110	100	75
CD-EW24	272 lbs.	2	90	70	..	..	..	..
CD-EW34	274 lbs.	3	70	55	..	..	..	..
CD-EW44	276 lbs.	4	55	45	..	..	..	..

Type "EWM"—100 Amp., 600 Volts
Special Mill Type

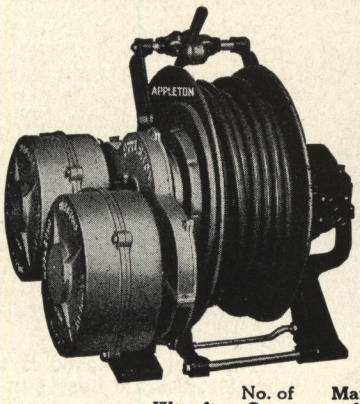
CD-EWM15	285 lbs.	1	140	135	120	110	100	75
CD-EWM25	287 lbs.	2	90	70	..	..	..	..
CD-EWM35	289 lbs.	3	70	55	..	..	..	..
CD-EWM45	291 lbs.	4	55	45	..	..	..	..

RATCHET—For installations where constant tension is not desired, a gravity-type ratchet may be furnished at extra charge. See Schedule "CD." Orders must specify mounting position of Reelite base.

CONSTANT DUTY REELITES

SPRING-DRIVEN CABLE LIFT REEL TYPE "EG" FOR "W" CABLES

Rating — 100 Amp., 600 Volts



When ordering, specify catalog number of Reelite; length, gauge and number of conductors of cable. Spring-driven through cut gears. Cable outlet is four roller guide type.

Material is cast aluminum and steel. Black enameled finish.

Cat. No.	Wt. of Reelite Only	No. of Conductors	Max. Capacity, in Feet of Various Sizes and Conductors of Cable No.8	No.6	No.4	No.3	No.2	No.1
CD-EG22	358 lbs.	2	..	75	60	55	50	45
CD-EG32	360 lbs.	3	75	65	55	50	45	40
CD-EG42	362 lbs.	4	70	60	50	45	40	35
CD-EG14	370 lbs.	1	..	..	130	130	120	110
CD-EG24	372 lbs.	2	110	105	90	70	65	50
CD-EG34	374 lbs.	3	105	100	75	65	60	45
CD-EG44	376 lbs.	4	100	85	60	55	45	..

RATCHET—For installations where constant tension is not desired, a gravity-type ratchet may be furnished at extra charge. See Schedule "CD." Orders must specify mounting position of Reelite base.

ROLLER CABLE OUTLETS

For Constant Duty Reelites

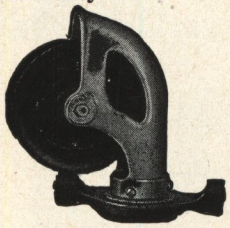
In order to obtain maximum efficiency from the Constant Duty Reelite, it is necessary not only to choose the correct outlet but also to set it in correct position so that future difficulties and additional expenses are avoided.

GUIDE ROLLER TYPE CABLE OUTLET

Used generally for all conditions where cable is drawn at a tangent to reel drum. Cable may be pulled within a conical plane of 30 to 40 degrees without a serious loss of efficiency.



Guide Roller Type

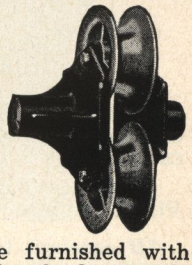


SWIVEL TYPE CABLE OUTLET

Used where cable must be drawn at right angles to drum and in arcs of a maximum range of 225 degrees. Only cable O. D. of 1⅛-inch and less can be used with this outlet.

LARGE ROLLER TYPE

Used for installation where cable is drawn out in a straight line parallel to the track and where current source is at the mid-point of the runway. Only cable O.D. of 1⅛-inch and less can be used.



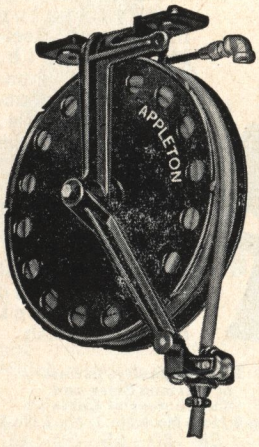
All Constant Duty Reelites are furnished with Guide Roller Type Cable Outlet as Standard at no additional cost. When purchased separately, prices on request.

Schedule "RE" Discounts—Group 3

TYPES CA AND CF AIR-FLUID REELS

FOR PAINT-SPRAY AND BLOW GUN APPLICATIONS

Max. Pressure: Air — 150 Lbs. Fluid — 125 Lbs.



Type "CA" Air Hose Reel equipped with 25 ft. of ¼" Air Hose

The CA and CF Air and Fluid Reels are particularly useful for light duty pneumatic tool, paint spray, and blow gun applications where it is desirable to keep the hose free from kinks and out of the way. They are especially valuable in places where low head room is at a premium and where the compact design of the reel unit permits easy installation.

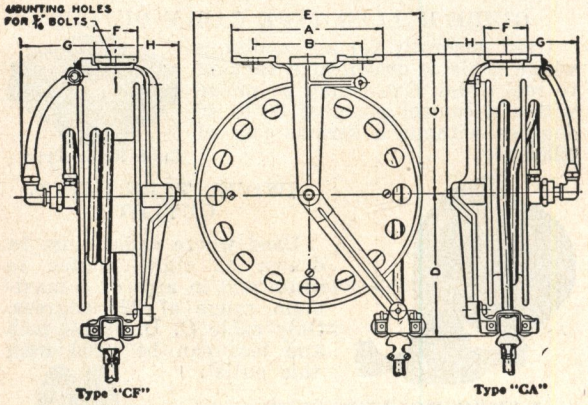
The hose furnished is a durable, 2-braid hose suitable for average conditions. It is recommended that paint-fluid hose be used only for paint or fluid installations as air service is usually severe on the specially compounded rubber necessary for paints and oil solvents.

The hose outlet is adjustable and should be so set that the hose does not drag around the rollers when mounted on the wall or ceiling.

Type CA and CF Air and Fluid Reels*

Furnished Complete with 25 ft. of Hose

Cat. No.	Service	Inside of Hose I.D.	Inside of Hose O.D.	Shpg. Wt. Lbs.
CD-CA11A	Air	¼"	$\frac{9}{16}$"	27
CD-CA22A	Air	⅜"	47/64"	32
CD-CF22A	Fluid Paint†	⅜"	$\frac{11}{16}$"	32



Type "CF" Type "CA"

DIMENSIONS IN INCHES

Cat. No.	A	B	C	D	E	F	G	H
CD-CA11A	9	6½	8¼	8½	13½	2½	4⅜	3⅝
CD-CA22A	9	6½	8¼	8½	13½	2½	6⅜	3⅝
CD-CF22A	9	6½	8¼	8½	13½	2½	6⅜	3⅝

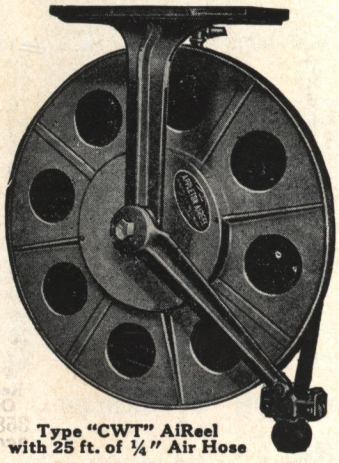
†This hose has proper outside diameter for DeVilbiss fittings.

*If constant tension is unnecessary, reels will be equipped with ratchet device at extra charge. A slight jerk on the hose line allows the hose to be drawn in. Orders must specify if ratchet is desired. Ratchets can be used only with ceiling installations.

ADJUSTABLE TYPE AIREEL

FOR PNEUMATIC TOOL APPLICATIONS

Types CWT and CTL—Air Pressure: 150 Lbs. Max.



Type "CWT" AiReel with 25 ft. of ¼" Air Hose

Tangled and twisted air hose cause waste, inefficiency, and accidents. The CWT and CTL open style, industrial AiReels automatically wind and maintain constant tension on air hose lines of portable air-driven tools.

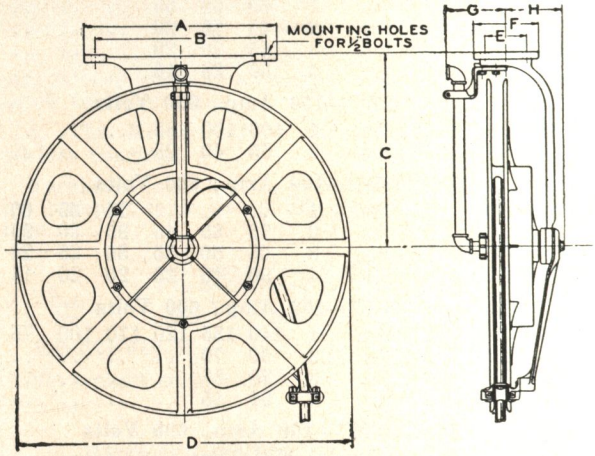
The AiReel can be mounted well up and out of the way, either on the ceiling or wall. The outlet support arm is adjustable and should be set so that the air hose is drawn through the rollers with a minimum of friction.

The swivel air joint is positive, self-adjusting, and requires no attention. AiReels are equipped with strong, closely braided, extra flexible air hose which has ample strength to withstand high pressures and pulsating loads.

Furnished complete with two braid air hose.

Cat. No.	Size of Hose I.D.	Size of Hose O.D.	Length of Hose in Feet	Shipping Weight Pounds
CD-CWT11A	¼	¾	25	70
CD-CWT21A	⅜	47/64	25	75
CD-CWT31A	½	$\frac{29}{32}$	25*	75
CD-CTL31B	½	$\frac{29}{32}$	50	100
CD-CTL41B	¾	1-13/64	50	110

RATCHET—For installations where constant tension is not desired, a gravity-type ratchet may be furnished at extra charge. See Schedule "CD." Orders must specify mounting position of Reelite base.



DIMENSIONS IN INCHES

Cat. No.	A	B	C	D	E	F	G	H
CD-CWT11A	11	9	11¾	19½	4	5½	3½	3¼
CD-CWT21A	11	9	11¾	19½	4	5½	3½	3¼
CD-CWT31A	11	9	11¾	19½	4	5½	3½	3¼
CD-CTL31B	18	16	18	30¾	4	6	5½	5¼
CD-CTL41B	18	16	18	30¾	4	6	5⅛	5⅛

*Only 20 feet of hose are wound on reel drum; five feet of hose remain outside.

ARTIFICIAL LIGHTING

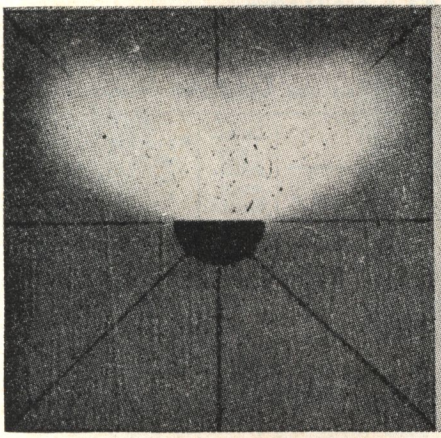


Figure 2. Indirect lighting.

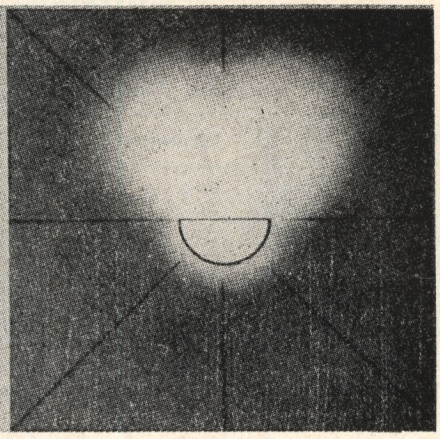
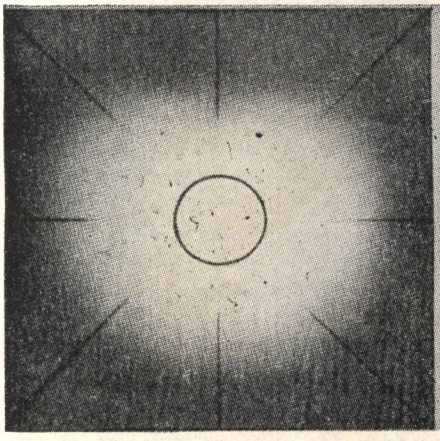


Figure 3. Semi-indirect lighting.



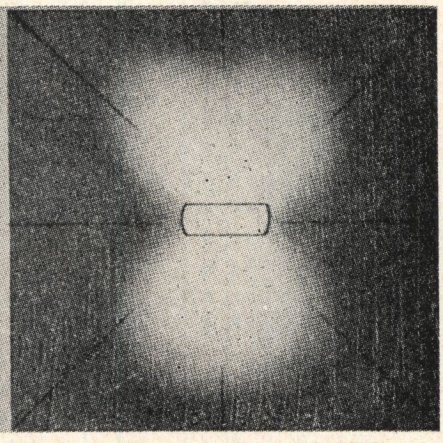


Figure 4. (a) Diffusing enclosure, (b) direct-indirect general diffuse lighting.

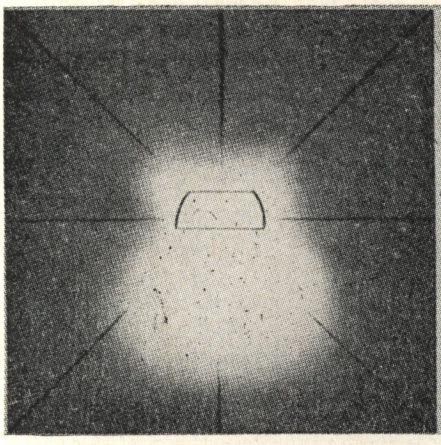


Figure 5. Semi-direct lighting.

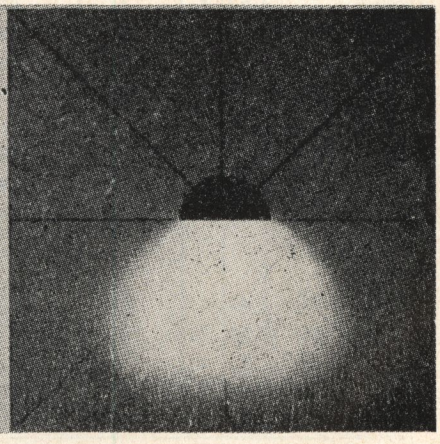


Figure 6. Direct lighting.

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OPERATING CHARACTERISTICS OF VARIOUS LIGHTING INSTALLATIONS

TABLE B-1

AVERAGE OPERATING FOOTCANDLES RESULTING FROM VARIOUS LIGHTING INSTALLATIONS*

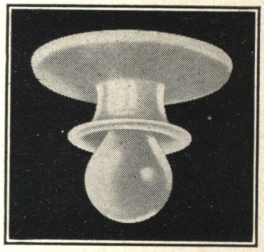
Type of lighting (1)	Luminaires			Lamp Data			Luminaire Efficiency Range (8)	Watts per Sq. Ft. (9)	Footcandle Range (10)	Room Plan (11)
	No. (2)	Lps. Ea. (3)	Rows (4)	Watts and Bulb, Tube (5)	Lamp Lumens (6)	Type # (7)				
Opaque or	6	1	2	750, PS-52	15,500	Inc.	70–80	6.1	25–32	1
Luminous	6	1	2	1000, PS-52	21,500	Inc.	70–80	8.2	35–44	1
Indirect:	8	1	2	750, PS-52	15,500	Inc.	70–80	8.2	34–42	2
90%–100%	6	1	2	500, PS-40	9,950	Inc.	70–80	4.1	16–20	1
up, 10%–	8	1	2	500, PS-40	9,950	Inc.	70–80	5.5	22–27	2
0% down	12	1	3	500, PS-40	9,950	Inc.	70–80	8.2	32–40	2
	12	1	3	300, PS-35	5,650	Inc.	70–80	4.9	18–23	2
	14	4	2	40, T -12	2,100	Fl.	70–80	3.6	32–40	3
	15	2	3	85, T -17	4,000	Fl.	70–80	4.7	33–41	3
	21	4	3	40, T -12	2,100	Fl.	70–80	5.5	48–60	3
	20	2	4	85, T -17	4,000	Fl.	70–80	6.3	43–55	3
Semi-Indi-	6	1	2	750, PS-52	15,500	Inc.	70–80	6.1	28–40	1
rect: 60%–	6	1	2	1000, PS-52	21,500	Inc.	70–80	8.2	39–55	1
90% up,	6	1	2	500, PS-40	9,950	Inc.	70–80	4.1	18–25	1
40%–10%	8	1	2	500, PS-40	9,950	Inc.	70–80	5.5	24–34	2
down	12	1	3	500, PS-40	9,950	Inc.	70–80	8.2	36–50	2
	12	1	3	300, PS-35	5,650	Inc.	70–80	4.9	20–29	2
	14	4	2	40, T -12	2,100	Fl.	70–80	3.6	35–50	3
	12	2	2	85, T -17	4,000	Fl.	70–80	3.8	29–41	3
	18	2	3	85, T -17	4,000	Fl.	70–80	5.7	43–61	3
General	8	1	2	500, PS-40	9,950	Inc.	65–75	5.5	28–37	2
Diffusing:	12	1	3	500, PS-40	9,950	Inc.	65–75	8.2	42–55	2
40%–60%	8	1	2	300, PS-35	5,650	Inc.	65–75	3.3	16–21	2
up, 60%–	12	1	3	300, PS-35	5,650	Inc.	65–75	4.9	24–31	2
40% down	21	2	3	40, T -12	2,100	Fl.	65–75	2.7	31–41	3
	12	4	2	40, T -12	2,100	Fl.	65–75	3.1	35–47	3
	24	2	4	40, T -17	2,100	Fl.	65–75	3.5	35–47	3
	28	2	4	40, T -12	2,100	Fl.	65–75	3.6	41–55	3
	14	4	2	40, T -12	2,100	Fl.	65–75	3.6	41–55	3
	18	4	3	40, T -12	2,100	Fl.	65–75	4.7	52–69	3
Semi-Direct:	18	2	3	40, T -12	2,100	Fl.	60–70	2.3	27–37	3
10%–40%	12	2	2	40, T -12	2,100	Fl.	60–70	1.6	18–25	3
up, 90%–	15	2	3	40, T -17	2,100	Fl.	60–70	2.2	22–31	3
60% down										
Direct: 0%–	40	1	8	40, T -12	2,100	Fl.	60–70	2.6	36–44	4
10% up,	30	1	6	40, T -12	2,100	Fl.	60–70	1.9	27–33	4
100%–90%	32	1	8	40, T -17	2,100	Fl.	65–75	2.3	32–39	4
down	24	1	6	40, T -17	2,100	Fl.	65–75	1.7	24–29	4
	48	1	6 x 2**	40, T -17	2,100	Fl.	65–75	3.5	48–59	4

Inc.—Incandescent filament; Fl.—Fluorescent.

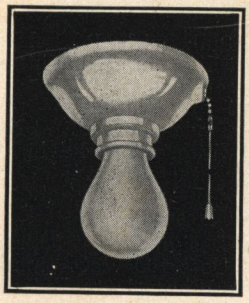
* Artificial lighting designs for less than the standard footcandle levels (Table 11) should

From the AMERICAN STANDARD PRACTICE FOR SCHOOL LIGHTING *presented through the courtesy of the American Illuminating Engineering Society.*

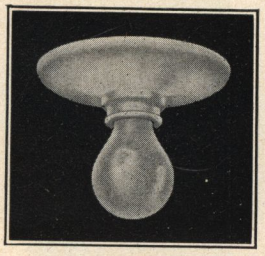
P & S ALABAX LIGHTING FIXTURES



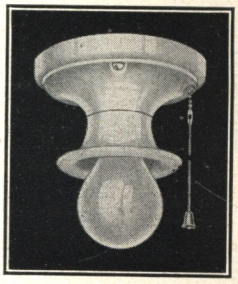
AL-3140-1 Keyless.
Diameter 5½"; Extends Down 2⅜". For 3¼" and 4" boxes.



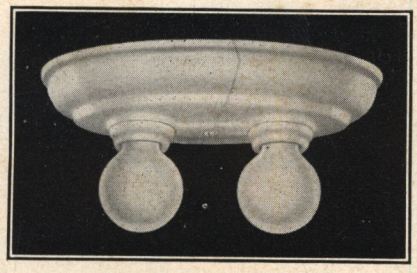
AL-859 Pull, short chain and long cord.
AL-2029 Pull, short chain.
AL-898 Keyless.
AL-848 Pull, short insulated chain.
With shade holder ring.
Diameter 4-13/16"; Extends Down 2-11/32".
For 3¼" or 4" boxes.



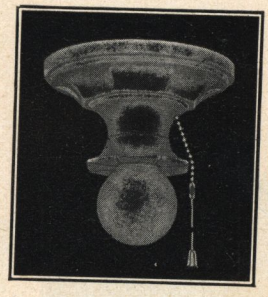
AL3140 Keyless.
AL-3140-LFT Keyless, for lamp with left hand thread.
With shade holder ring.
Diameter 5½"; Extends Down 1¾". For 3¼" and 4" boxes.



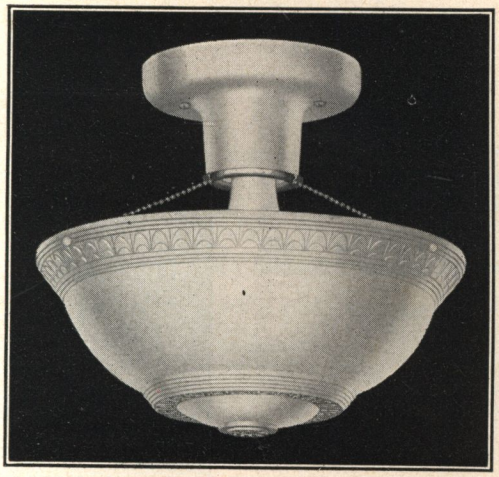
AL-2007-ND Pull, short chain and long cord.
AL-2011-ND Keyless.
Diameter 4¾"; Extends Down 3⅝". For 3¼" or 4" boxes.



AL-2202 2-light, keyless, oval.
Length 10"; Width 5¾"; Extends Down 3". For 3¼" or 4" boxes.



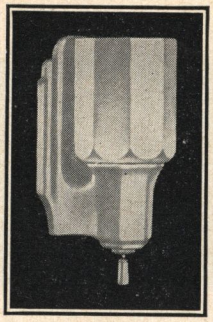
AL-2400 Pull, short chain, long cord.
AL-2401 Keyless.
Diameter 5½"; Extends Down 3¼". For 3¼" and 4" boxes.



With Bowl as Illustrated

AL-2378. Keyless, with 9" plastic bowl.
AL-2169 9" plastic bowl only.
Extends Down 10".
For lamp 75 or 100 watts.
AL-2379 Keyless, with 12" plastic bowl.
AL-2170 12" plastic bowl only.
Extends Down 11".
For lamp 100 or 150 watts.
AL-2107-2 Porcelain base only.
Diameter of Fixture Base 5-11/16".
For 3¼" or 4" boxes.

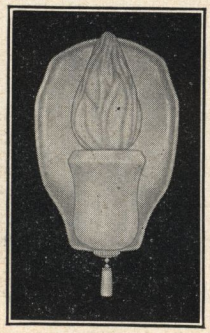
P & S ALABAX LIGHTING FIXTURES



With Glass as Illustrated

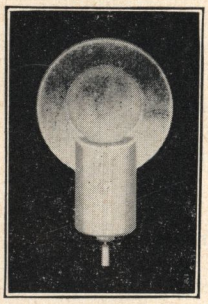
AL-2675 Pull, with outlet.
AL-2676 Pull, no outlet.
AL-2677 Keyless, with outlet.
AL-2678 Keyless, no outlet.
AL-2679 Glass only.

Patent Applied For.
Uses 75 watt lamp or smaller.
Width 2¾"; Height 6¼"; Extends Out 3½".



AL-3100 Pull, with outlet.
AL-3101 Pull, no outlet.
AL-3102 Keyless, with outlet.
AL-3103 Keyless, no outlet.

Width 4"; Height 6-3/16"; Extends Out 3⅞".



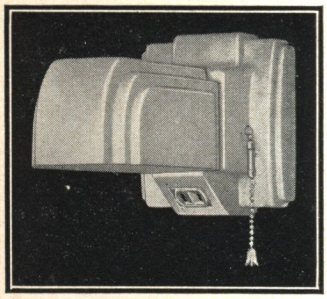
AL-2108 Pull, with outlet.
AL-2109 Pull, no outlet.
AL-2110 Keyless, with outlet.
AL-2111 Keyless, no outlet.

Height 6¾"; Width 4¾"; Extends Out 3¼".

With Glass as Illustrated

AL-2380 Pull, with P&S No. 1420 white outlet, having double contacts.
AL-2381 Pull, no outlet.
AL-2382 Keyless, with P&S No. 1420 white outlet, having double contacts.
AL-2383 Keyless, no outlet.
AL-2384 Glass only.

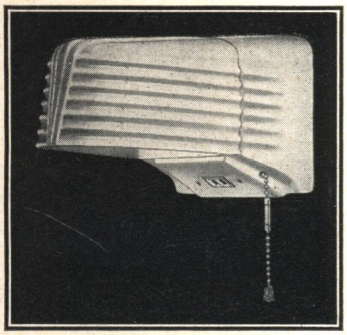
Patented—Design Patent 95,226.
Uses 100 Watt Lamp
Length 5"; Width 4½"; Extends Out 7½".
For 3¼", 4", or switch boxes.



With Glass as Illustrated

AL-2390 Pull, with P&S No. 1420 white outlet, having double contacts.
AL-2391 Pull, no outlet.
AL-2392 Keyless, with P&S No. 1420 white outlet having double contacts.
AL-2393 Keyless, no outlet.
AL-2394 Glass only.

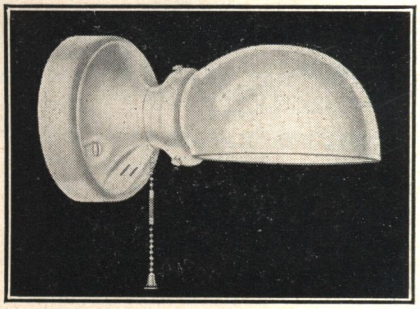
Patented—Design Patent 110,890.
Uses 100 watt lamp.
Height 4⅝"; Width 4⅝"; Extends Out 7⅝".
For 3¼", 4", or switch boxes.



With Glass as Illustrated

AL-2100-ND Pull, with outlet.
AL-2101-ND Keyless, with outlet.
AL-2102-ND Pull, no outlet.
AL-2103-ND Keyless, no outlet.
AL-2209 Glass only.

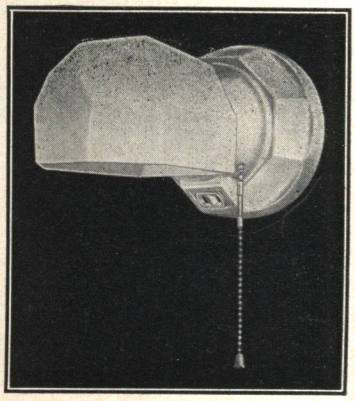
Uses 100 watt lamp.
Diameter 4¾"; Extends Out 9".
For 3¼", 4", or switch boxes.



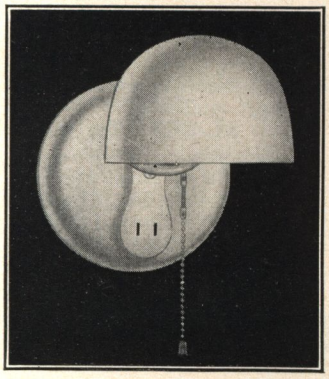
With Glass as Illustrated

AL-9234 Pull, with P&S No. 1420 white outlet having double contacts.
AL-9235 Pull, no outlet.
AL-9236 Keyless, with P&S No. 1420 white outlet, having double contacts.
AL-9237 Keyless, no outlet.
AL-3074 Glass only.

Uses 100 watt lamp.
Diameter 5"; Extends Out 8¼".
For 3¼", 4", or switch boxes.



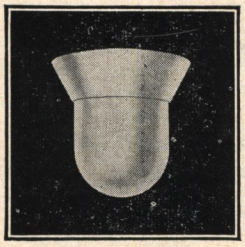
P & S ALABAX LIGHTING FIXTURES



With Glass as Illustrated

AL-990-G Pull, with outlet.
AL-980-G Keyless, with outlet.
AL-982-G Pull, no outlet.
AL-984-G Keyless, no outlet.
AL-2209 Glass only.

Uses 100 watt lamp.
Diameter 5⅜"; Extends Out 8¾".
For 3¼", 4", or switch boxes.



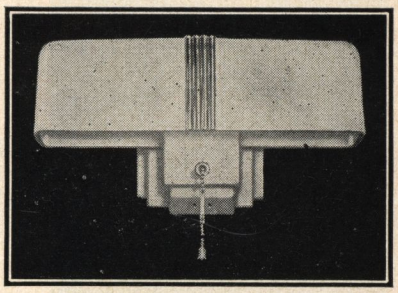
With Glass as Illustrated

Fixture

AL-2300 with 5" CRI glass.

AL-2303 with 5" opal glass.

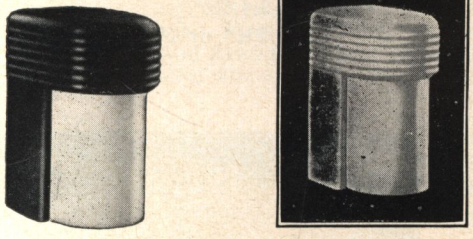
AL-2301 with 6" CRI glass.



With Glass as Illustrated

AL-2850 Pull, with outlet.
AL-2851 Pull, no outlet.
AL-2852 Keyless, with outlet.
AL-2853 Keyless, no outlet.
AL-2854 Glass only.

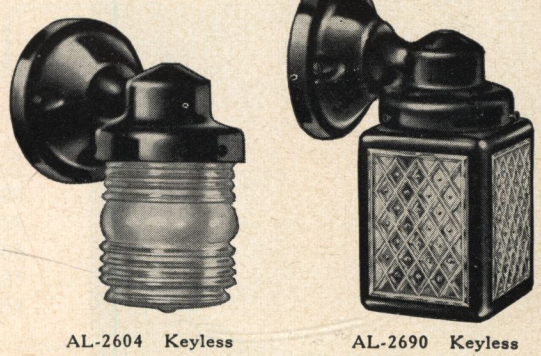
Uses two 75 watt lamps.
Width 10¾"; Height 5½"; Extends Out 5¼". For 3¼", 4", or switch boxes.



With Glass as Illustrated

AL-3129 Keyless, white glaze, with outlet.
AL-3130 Keyless, white glaze, no outlet.
AL-3131 T rated Push switch, white glaze, with outlet.
AL-3134 Keyless, black glaze, no outlet.
AL-3137 Keyless, ivory glaze, no outlet.
AL-3133 Glass tube only.

Patented—Design Patent 114,805.
Width 3½"; Height 6¼"; Extends Out 5".
Use 75 watt lamp or smaller.
For 3¼" or switch boxes.



AL-2604 Keyless AL-2690 Keyless

With Glass as Illustrated

3¼" Fitter
Uses 75 watt lamp
Diameter at Base 4¾"; Extends Out 5¾".

With Glass as Illustrated

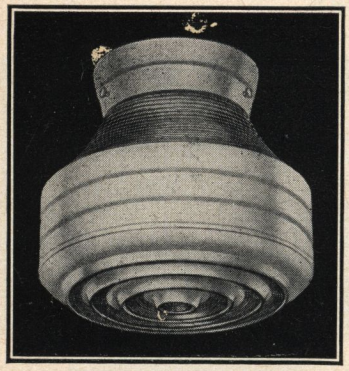
AL-2685 Has 2-circuit switch and outlet.

AL-2686 Has 2-circuit switch, no outlet.

Has an entirely new feature—a second socket to hold a 6 watt night lamp. S-6 night lamp is supplied with fixture. Uses 100 watt illuminating lamp or smaller.
Diameter of Base 5"; Extends Out 8⅜".



P & S ALABAX LIGHTING FIXTURES



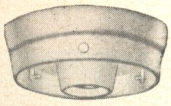
With Glass as Illustrated

AL-2608 4″ fitter, complete with glass, 8¼″ diam. x 7″ deep.

Suggested wattage: 100.

Diameter of Base: 5-7/32″; Extends Down 7¾″.

For 3¼″ and 4″ boxes.



AL-2072 Keyless, ivory.

AL-2073 Keyless, white.

Fitter Size 4″; Diameter 5-7/32″; Extends Down 1½″.

For 3¼″ and 4″ boxes.



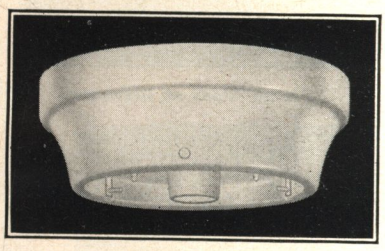
With Glass as Illustrated

AL-2432 4″ fitter, complete with glass 8⅜″ diam. x 6¼″ deep.

Suggested wattage: 100.

Diameter of fixture 5-7/32″; Extends Down 7¼″.

For 3¼″ or 4″ boxes.



AL-2204 Keyless, 6″ fitter, medium base.

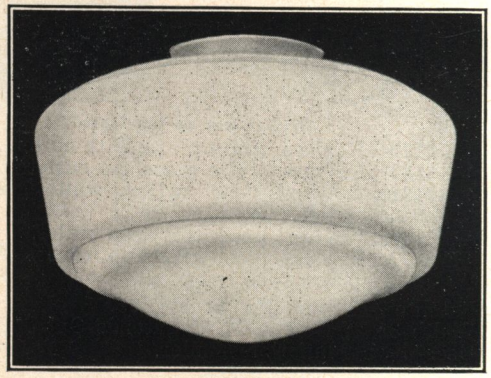
May be supplied with hole for Levolier switch No. 43.

Diameter 8⅞″; Extends Down 3-1/32″.

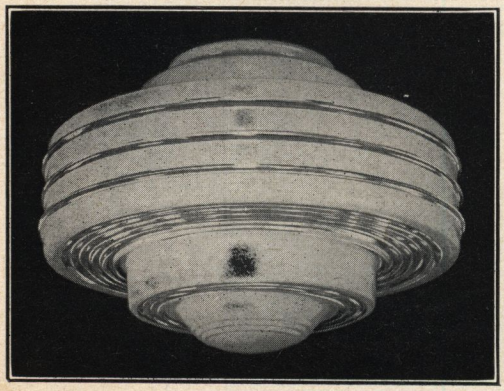
For 3¼″ or 4″ boxes.



Cat. No.	Diam.	Fitter Size	Depth	Suggested Wattage
AL-2420	10″	4″	7⅛″	100
AL-2421	12″	6″	8⅝″	150
AL-2422	14″	6″	10″	200
AL-2423	16″	6″	11⅜″	300



Cat. No.	Diam.	Fitter Size	Depth	Suggested Wattage
AL-2425	8-7/16″	4″	5⅞″	100
AL-2426	9″	4″	6⅜″	100
AL-2427	10″	4″	6¼″	100-150
AL-2428	12″	6″	7⅜″	150-200
AL-2429	14″	6″	8¾″	200-300
AL-2430	16″	6″	10⅛″	300

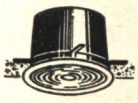


Cat. No.	Diam.	Fitter Size	Depth	Suggested Wattage
AL-2435	6⅜″	4″	5¼″	60-75
AL-2436	8⅜″	4″	6¼″	100
AL 2437	14⅜″	6″	9¼″	300

KLIEGL RECESSED CEILING FIXTURES

FRESNEL-LENS UNITS

Flush inbuilt type. Provide high intensity direct illumination. Accommodate standard screw base lamps. Furnished complete with back box, mounting arrangements, wired porcelain receptacle, Alzak aluminum reflector, Fresnel lens with painted risers, and hinged front frame. Approved by Underwriters.


No 22 F 12

CIRCULAR LENS TYPES

Cat. No.	Lens Diam. Inches	Lamps Watts	Price Each
22 F 06	6	100	$24.00
22 F 08	8	150	27.00
22 F 12	12	200/300	41.00
22 F 14	14	300/500	50.00


No 24 F 12

SQUARE LENS TYPE

Cat. No.	Lens Diam. Inches	Lamps Watts	Price Each
24 F 06	6	100	$30.00
24 F 08	8	150	34.00
24 F 12	12	200/300	46.00

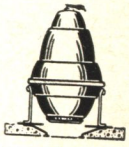
KLIEGL DOWNLIGHTS

OVER-CEILING FIXTURES

Concealed types. Project light beam through small hole in ceiling. Provide high-intensity direct illumination. Various designs for both general and defined-area lighting.

FIXED BEAM TYPES

For general lighting. Give soft edge beam. Use standard service lamps. Furnished with ellipsoidal reflector and fixed-focus lens system. Relamped from above or below ceiling.


No. 2503

Cat. No.	Description	Price Each
2503	200/300 watt Md. Sc.	$56.00
2504	300/500 watt Md. Sc.	88.00
2505	750/1000 watt Md. Bipt.	92.00

ADJUSTABLE BEAM TYPES

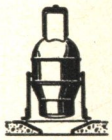
For defined lighting and general illumination — for straight down or approximately 45 degree angular projection. Sharp or soft-edge cut-off. Shape and size of beam can be regulated. Equipped with focusable lens system, adjustable framing shutters, and reflector. Use concentrated filament type lamps.


No 2145

Pin-hole Spot Units — relamped from below. Furnished with plaster ring, removable aperture plate, spherical reflector. Listed by Underwriters.

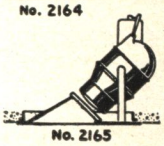
Cat. No.	Rating	Projection	Price Each
2145	100 watt	Straight down	$45.00
2146	100 watt	Angular	45.00

High Ceiling Units—relamped from above. Furnished with plaster cone, and ellipsoidal reflector.


No. 2164

Straight-down Projection

Cat. No.	Description	Price Each
2164	250/500 watt	$48.00
2166	1000 watt	82.00
2168	1500/2000 watt	94.00


No. 2165

Angular Projection

Cat. No.	Description	Price Each
2165	250/500 watt	$70.00
2167	1000 watt	100.00
2169	1500/2000 watt	112.00

KLIEGL ILLUMINATED EXIT SIGNS

FLUSH WALL TYPES



No 697

Recessed in wall flush with surface. Wall box and front frame furnished as separate parts.

Screw-on style front — sheet metal frame, sprayed bronze finish. Ruby glass face plate. Plain white letters.

Cat. No.	Letters Inches	Front Frame Inches	Box Depth Inches	Price Each
6945	5	12½ x 8	3½	$11.00
6946	6	15 x 9	3½	12.00
6948	8	17 x11½	3½	18.00

Hinged style front—cast bronze frame with hinged panel, statuary bronze finish. Ruby glass face plate. Fancy white letters.

Cat. No.	Letters Inches	Front Frame Inches	Box Depth Inches	Price Each
696	3	14¼ x 7	5	$26.00
697	4	15¾ x 9	5	28.00
699	6	17¼ x10⅜	5	36.00
698	8	18 x12	5	44.00
697W	Same as No. 697 but with wire guard			32.00

SURFACE TYPES



No 685

Mounted on surface of wall, or semi-recessed, allowing ½" projection for removal of glass panel. Glass slides in from side. Single face signs, sheet metal box, sprayed gold bronze finish, ruby glass face plate, white letters.

Cat. No.	Letters Inches	Box Inches	Box Depth Inches	Price Each
680	3	10 x 5	3½	$7.00
685	5	11½ x 6¾	3½	7.50
686	6	14 x 8	3½	9.00
687	8	12 x10	3½	9.50
690	8	15¾ x10	3½	10.00

Double face signs also available.

OUTLET-BOX TYPES



No. 711-A

No. 711—Made for attachment to standard octagonal 4" outlet box in wall—includes base plate, medium screw lamp socket, red lens with opaque letters, and hinged front. Finished in statuary bronze. 5" diameter; 2½" letters. Price $6.00
Satin Chrome 7.70

KLIEGL PICTURE LIGHTS

PROJECTOR TYPES


No 276 AA

Fitted with objective lens system and adjustable framing shutters, permitting confinement of light within picture area.

Cat. No.	Lamp Watts		Type of Lamp	Price Each
276	75 or 100	G16½	Bayonet Base	$28.00
276AA	100	P25	Med. Screw Base	36.00
	250 or 400	G30		

KLIEGL SPOTLIGHTS

FRESNEL LENS TYPES

Equipped with refracting prismatic Fresnel type lens—producing a soft-edge high intensity light beam. Accommodate standard concentrated filament incandescent lamps. Adjustable lamp carriage for focusing. Alzak aluminum reflectors. Slide grooves for color frames. Furnished with suspension mounting (pipe clamp), wall bracket, table base, or floor stand.

Cat. No.	Watts	Lens Diam. Inches	Price Each
43N3-A	100	3	$21.00
43N6-A	500	6	25.00


No 43N3


No 43N6

(Nos. 43N3 and 43N6 are normally supplied with extension cord, attachment plug, and wall bracket, but may be had with suspension mounting, or table base at same price—or No. 43N6 on floor stand at $7.00 additional cost).


No 43 N 16

Cat. No.	Watts	Lens Diam. Inches	Price Each
43N8-CR	1000	8	$106.00
43N12-CR	2000	12	160.00
43N16-CR	5000	16	270.00

(Above items Nos. 43N8 to 43N16, as listed, are supplied mounted on telescopic floor stand with rubber tired casters and furnished with 25′ cable and switch. For counterbalanced units see overhead boom spot.)

KLIEGL COLOR GELATINES

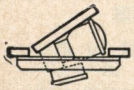
ALL STANDARD COLORS

Conventional Gelatine, 20″x24″ sheets.
Price ..... $0.24 per sheet
Heat-resisting and waterproof cinemoid. Price 20″x24″ sheets $1.25

KLIEGL FOOTLIGHTS

DISAPPEARING TYPES

When not in use are closed down flush with stage floor. Furnished in standard 5 ft. lengths. Completely assembled. Wired for 3 colors. Automatic mercury disconnecting switches. Solid kiln-dried oak flooring. Malleable iron cross brackets, positive latches. Terminal blocks for feeder connections. Listed by Underwriters.

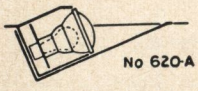



No. 832

Individual reflector style, with individual Alzak aluminum reflectors and glass color-roundels; for use with clear or inside-frosted lamps.
No. 832—Single row, hinged mounting, continuous flooring, 5 ft. section, 12 outlets, 100 watts.... $100.00

PERMANENT TYPES

Fixed in position. Hood extends minimum above stage floor. Any length or curvature required. Wired as specified, for 3 or more colors. Receptacles spaced as indicated. Listed by Underwriters.


No 620-A

No. 620A — Single row receptacles, individual Alzak aluminum reflectors, glass color roundels, 100 watt outlets, spaced 6″ on centers.
Price on Application

KLIEGL KLIEGLIGHTS

High intensity light beam projectors with ellipsoidal reflectors, lens system, and coordinated shutter arrangement which permits direct regulation of size and shape of beam in every conceivable manner, so as to confine the light within any desired area. Accommodate standard bipost base up burning concentrated filament lamps.

MOUNTED TYPES


No 1163

For permanent installation supplied with square shutters; short leads; wall bracket, pipe clamp, or table base. (Can be supplied on floor-stands at additional cost).

Drop-In Shutter Arrangement

Cat. No.	Watts	Lens Diam. Inches	Price Each
1163A	250/500	5	$39.00

Built-In Square Shutter Arrangement

Cat. No.	Watts	Lens Diam. Inches	Price Each
1165	250/500	6	$68.00
1366	1000/2000	6	110.00
1368	1000/2000	8	110.00

For Iris Shutters, add $16.50 to above prices.


No 1168 CR

PORTABLE TYPES

Mobile units. Mounted on telescopic floor stands with rubber tired casters, and additionally equipped with built-in iris shutter, as well as framing shutter. Controls conveniently located and arranged for quick and easy manipulation, such as required for service intended. Equipped with 25′ cable and switch.

Cat. No.	Watts	Lens Diam. Inches	Price Each
1366-CR	1000/2000	6	$160.00
1368-CR	1000/2000	8	160.00

KLIEGL WALK LIGHTS

AISLE, STEP AND CORRIDOR


No 2780

Cast subdued light downward on steps and aisle-ways, or diffused light in corridors.


No. 675

No. 2780—Midget model for mounting on side of end seats adjoining aisle. For 6 watt 115 volt candelabra screw base lamp; size: 4¼″ L. x 1¼″ H. x 1⅜″ D. Price, ... $5.50

No. 675—Aisle spot for mounting on side of end seats adjoining aisleways. Cast aluminum housing with control lens, and receptacle for 10 watt S 14 lamp; size 3″ W. x 6″ H. x 2¼″ D. Price, ... $6.00


No 2677

No. 2677 — Step light for stairways, mounted flush in riser. Louvered opening direct light to tread. Removable cast aluminum front. For 40 watt medium screw base lamp; size 8″ W. x 4⅛″ H. x 3½″ D. Price, ... $5.50


No. 2666

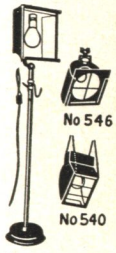
No. 2666—Aisle light for flush wall mounting. Louvered front directs light to floor. For 40 watt medium screw base lamp. Front removable; size: 4⅛″ W. x 8″ H. x 3½″ D. Price, ... $5.50


No. 2681

No. 2681—Corridor light, for flush wall mounting, cast bronze removable front, wire-glass face. For 40 watt medium screw base lamp; size: 5″ W. x 8½″ H. x 3½″ D. Price, ... $9.00

KLIEGL STAGE FLOODLIGHTS

Used from side wings or from overhead on the stage. Provided with slide grooves on front for color frames with gelatine mediums. For P.S. lamps.



Standing Types

No. 1N — Open-box reflector sprayed white, grooves for color frame; 500/1500 watt; pedestal floor stand, 25 ft. cable $45.00

No. 2N—Parabolic boxed Alzak aluminum reflector; grooves for color frame: 500/1500 watt; pedestal floor stand, 25 ft. cable $51.00

Hanging Types

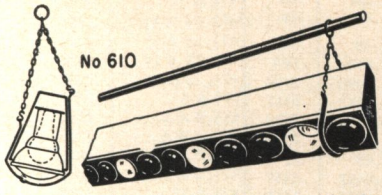
No. 540 — Open-box reflector sprayed white; 500 watt; asbestos leads; chain hangers; grooves for color frame $27.00

No. 546—Parabolic boxed Alzak aluminum reflector; 500 watt; asbestos leads; grooves for color frames; pipe clamp hanger. Price $36.00

KLIEGL BORDERLIGHTS

Any continuous length, or in sections. Wired as specified, for 3 or more colors. Complete with splice box, scenery guards, and chain hangers. Listed by Underwriters.

INDIVIDUAL REFLECTOR TYPE

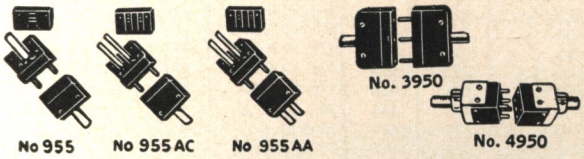


For clear or inside frosted lamps. Alzak aluminum individual reflectors. Heat-resisting glass color roundels, hinged-ring roundel holders. Porcelain screw-base receptacles.

No. 610—100 or 150 watt outlets (as specified) 6″ on centers ..... Price on Application

KLIEGL CONNECTORS

TWO, THREE AND FOUR POLE



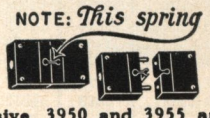
Separable pin-plug type. Made in two sections. Male end fitted with brass split pins, female end with brass sleeve. All live parts insulated with solid fibre. 250 volts. Listed by Underwriters.

Amp.	Two-Pole Cat. No.	Two-Pole Price Each	Three-Pole Cat. No.	Three-Pole Price Each	Four-Pole Cat. No.	Four-Pole Price Each
5	950	$2.20	3950	$4.00	4950	$6.50
15	955	2.75	3955	5.60	4955	7.20
30	956	3.60	3956	7.20	4956	10.00
60	957	6.60	3957	10.00	4957	16.40
100	958	20.00	3958	24.00	4958	33.00
200	959	70.00	3959	70.00	....	....

Note: Two-pole connectors listed are for connecting duplex to duplex. For connecting duplex to pair single conductor, add suffix "AC" to catalog number. For connecting two pair single conductor, add suffix "AA" to catalog number. Price same as for duplex to duplex.

Spring catch for 5/30 amp 2-pole connector: **$0.40** additional.

NOTE: *This spring*



Connectors Nos. 950 to 957 inclusive, 3950 and 3955 are reversible; can be furnished non-reversible at $0.60 each additional.

Connectors with any number of pins from 1 to 30 are available, also flush types.

KLIEGL POCKETS AND PLUGS

STAGE-FLOOR TYPE POCKETS



Set in floor flush with surface. Have hinged self-closing cover notched for passage of cable. Fitted with heavy-duty plug outlets. Furnished complete with 2-wire plugs. 250 volts. Listed by Underwriters.

Cat. No.	Description	Price Each
351	1 2-wire outlets, 50 amp. per outlet	$27.00
352	2 2-wire outlets, (1-25 and 1-50 amp.)	38.00
353	3 2-wire outlets, 25 amp. per outlet	48.00
354	4 2-wire outlets, 25 amp. per outlet	68.00

WALL TYPE POCKETS

Heavy-duty plug outlets for use wherever heavy current temporary connections are required — in theatres, projection booths, photographic studios, hotels, schools, industrial plants, etc. Furnished complete with 2-wire plugs. 250 volts. Listed by Underwriters.



Flush Wall Mounting

Cat. No.	No. of Outlets	Amperes Per Outlet	Price Each
310	1 2-wire	50	$16.00
311	2 2-wire	50	26.00
312	3 2-wire	50	36.00
313	4 2-wire	50	46.00



Surface Wall Mounting

307	1 2-wire	50	$14.00
317	2 2-wire	50	22.00
318	3 2-wire	50	32.00
319	4 2-wire	50	42.00

KLIEGL PLUGGING BOXES

PORTABLE TYPES



For conveniently and quickly connecting several circuits to single outlet. Plug receptacles mounted in iron case. Each receptacle independently fused. Feeder cable enters through special clamp. Furnished complete with plugs. Made to withstand rough usage. 250 volts.

Outlets 2-Wire	3-Main Wire No.	3-Main Wire Plug No.	3-Main Wire Price
6-30 Amp.	346	301½	$55.00
4-50 "	405	301	62.00
6-50 "	407	301	80.00

Furnished with cartridge fuses, unless otherwise ordered. Other arrangements for heavier current demands also available.

KLIEGL DIMMERS

Round plate dimmers, non-interlocking; for 2-wire 115-volt circuits.



Cat. No.	Watts	Size Inches	Price Each
1229	150	8	$34.50
1230	250	8	34.50
1231	400	8	34.50
1233	550	8	34.50
1234	650	8	34.50
1235	750	13	54.75
1236	1000	13	54.75
1237	1350	13	54.75
1238	1650	15½	74.00
1239	2000	15½	74.00
1240	2450	18	81.00
1241	2700	18	81.00
1242	3000	18	90.75

READY DISCOUNT COMPUTER

Discount Per Cent.	Equivalent.	Net.
2½	.025	.975
2½ & 2½	.0494	.9506
2½ & 5	.0737	.9263
2½, 5 & 2½	.0969	.9031
2½, 5 & 5	.1201	.8799
2½, 5, 5 & 2½	.1421	.8579
2½ & 10	.1225	.8775
2½, 10 & 2½	.1444	.8556
2½, 10 & 5	.166	.834
2½, 10, 5 & 2½	.1872	.8128
2½, 10 & 10	.2102	.7898
5	.05	.95
5 & 2½	.0738	.9262
5 & 5	.0975	.9025
5, 5 & 2½	.1201	.8799
5, 5 & 5	.1426	.8574
5, 5 5 & 2½	.164	.836
5 & 10	.145	.855
5, 10 & 2½	.1664	.8336
5, 10 & 5	.1877	.8123
5, 10 5 & 2½	.2081	.7919
5, 10 & 10	.2305	.7695
10	.10	.90
10 & 2½	.1225	.8775
10 & 5	.145	.855
10, 5 & 2½	.1664	.8336
10, 5 & 5	.1878	.8122
10, 5, 5 & 2½	.2081	.7919
10 & 10	.190	.81
10, 10 & 2½	.2103	.7897
10, 10 & 5	.2305	.7695
10, 10, 5 & 2½	.2497	.7503
10, 10 & 10	.271	.729
15	.150	.85
15 & 2½	.1713	.8287
15 & 5	.1925	.8075
15, 5 & 2½	.2127	.7873
15, 5 & 5	.2329	.7671
15, 5, 5 & 2½	.2521	.7479
15 & 10	.235	.765
15, 10 & 2½	.2541	.7459
15, 10 & 5	.2733	.7267
15, 10, 5 & 2½	.2914	.7086
15, 10 & 10	.3115	.6885
20	.20	.80
20 & 2½	.220	.78
20 & 5	.240	.76
20, 5 & 2½	.259	.741
20, 5 & 5	.278	.722
20. 5, 5 & 2½	.2961	.7039
20 & 10	.280	.72
20, 10 & 2½	.298	.702
20, 10 & 5	.316	.684
20, 10, 5 & 2½	.3331	.6669
20, 10 & 10	.352	.648
25	.25	.75
25 & 2½	.2688	.7312
25, 2½ & 2½	.2870	.713
25, 2½ & 5	.3053	.6947
25, 2½ & 7½	.3236	.6764
25, 2½ & 10	.3419	.6581
25 & 5	.2875	.7125
25, 5 & 2½	.3053	.6947
25, 5 & 5	.3231	.6769
25, 5 & 7½	.3409	.6591
25, 5 & 10	.3588	.6412
25 & 7½	.3063	.6937
25, 7½ & 2½	.3236	.6764
25, 7½ & 5	.3409	.6591
25, 7½ & 7½	.3583	.6417
25, 7½ & 10	.3756	.6244
25 & 10	.325	.675
25, 10 & 2½	.3419	.6581
25, 10 & 5	.3588	.6412
25, 10 & 7½	.3756	.6244
25, 10 & 10	.392	.6075
27½	.275	.725
27½ & 2½	.2931	.7069
27½, 2½ & 2½	.3108	.6892
27½, 2½ & 5	.3285	.6715
27½, 2½ & 7½	.3461	.6539
27½, 2½ & 10	.3638	.6362
27½ & 5	.3113	.6887
27½, 5 & 2½	.3285	.6715
27½, 5 & 5	.3457	.6543
27½, 5 & 7½	.3629	.6371
27½, 5 & 10	.3801	.6199
27½ & 7½	.3294	.6706
27½, 7½ & 2½	.3461	.6539
27½, 7½ & 5	.3629	.6371
27½, 7½ & 7½	.3797	.6203
27½, 7½ & 10	.3964	.6036
27½ & 10	.3475	.6525
27½, 10 & 2½	.3638	.6362
27½, 10 & 5	.3801	.6199
27½, 10 & 7½	.3964	.6036
27½, 10 & 10	.4128	.5872
30	.30	.70
30 & 2½	.3175	.6825
30, 2½ & 2½	.3346	.6654
30, 2½ & 5	.3516	.6484
30, 2½ & 7½	.3687	.6313
30, 2½ & 10	.3858	.6142
30 & 5	.335	.665
30, 5 & 2½	.3516	.6484
30, 5 & 5	.3683	.6317
30, 5 & 7½	.3849	.6151
30, 5 & 10	.4015	.5985
30 & 7½	.3525	.6475
30, 7½ & 2½	.3687	.6313
30, 7½ & 5	.3849	.6151
30, 7½ & 7½	.4011	.5989
30, 7½ & 10	.4173	.5827
30 & 10	.37	.63
30, 10 & 2½	.3858	.6142
30, 10 & 5	.4015	.5985
30, 10 & 7½	.4173	.5827
30, 10 & 10	.433	567
32½	.325	.675
32½ & 2½	.3419	.6581
32½, 2½ & 2½	.3583	.6417
32½, 2½ & 5	.3748	.6252
32½, 2½ & 7½	.3912	.6088
32½, 2½ & 10	.4077	.5923
32½ & 5	.3588	.6412
32½, 5 & 2½	.3748	.6252
32½, 5 & 5	.3908	.6092
32½, 5 & 7½	.4068	.5932
32½, 5 & 10	.4229	.5771
32½ & 7½	.3756	.6244
32½, 7½ & 2½	.3912	.6088
32½, 7½ & 5	.4068	.5932
32½, 7½ & 7½	.4225	.5775
32½, 7½ & 10	.4381	.5619
32½ & 10	.3925	.6075
32½, 10 & 2½	.4077	.5923
32½, 10 & 5	.4229	.5771
32½, 10 & 7½	.4381	.5619
32½, 10 & 10	.4533	5467
32½ & 20	.460	.54
32½, 20 & 2½	.4735	.5265
32½, 20 & 5	.4870	.5130
32½, 20 & 7½	.5005	.4995
32½, 20 & 10	.514	.486
32½, 20 & 20	.5680	.4320
35	.35	.65
35 & 2½	.3663	.6337
35, 2½ & 2½	.3821	.6179
35, 2½ & 5	.3979	.6021
35, 2½ & 7½	.4138	.5862
35, 2½ & 10	.4296	.5704
35 & 5	.3825	.6175
35, 5 & 2½	.3979	.6021
35, 5 & 5	.4134	.5866
35, 5 & 7½	.4288	.5712
35, 5 & 10	.4443	.5557
35 & 7½	.3988	.6012
35, 7½ & 2½	.4138	.5862
35, 7½ & 5	.4288	.5712
35, 7½ & 7½	.4438	.5562
35, 7½ & 10	.4589	.5411
35 & 10	.415	.585
35, 10 & 2½	.4296	.5704
35, 10 & 5	.4443	.5557
35, 10 & 7½	.4589	.5411
35, 10 & 10	.4735	.5265
35 & 20	.48	.52
35, 20 & 2½	.493	.507
35, 20 & 5	.5060	.4940
35, 20 & 7½	.4190	.5810
35, 20 & 10	.3520	.6480
35, 20 & 20	.5840	.4160
37½	.375	.625
37½ & 2½	.3906	.6094
37½, 2½ & 2½	.4059	.5941
37½, 2½ & 5	.4211	.5789
37½, 2½ & 7½	.4363	.5637
37½, 2½ & 10	.4516	.5484
37½ & 5	.4063	.5937
37½, 5 & 2½	.4211	.5789
37½, 5 & 5	.4359	.5641
37½, 5 & 7½	.4508	.5492
37½, 5 & 10	.4656	.5344
37½ & 7½	.4219	.5781
37½, 7½ & 2½	.4363	.5637
37½, 7½ & 5	.4508	.5492
37½, 7½ & 7½	.4652	.5348
37½, 7½ & 10	.4797	.5203
37½ & 10	.4375	.5625
37½, 10 & 2½	.4516	.5484
37½, 10 & 5	.4656	.5344
37½, 10 & 7½	.4797	.5203
37½, 10 & 10	.4938	.5062
37½ & 20	.50	.50
37½, 20 & 2½	.5125	.4875
37½, 20 & 5	.5250	.4750
37½, 20 & 7½	.5375	.4625
37½, 20 & 10	.55	.45
37½, 20 & 20	.60	.40
40	.40	.60
40 & 2½	.415	.585
40, 2½ & 2½	.4296	.5704
40, 2½ & 5	.4443	.5557
40, 2½ & 7½	.4589	.5411
40, 2½ & 10	.4735	.5265
40 & 5	.43	.57
40, 5 & 2½	.4443	.5557
40, 5 & 5	.4585	.5415
40, 5 & 7½	.4728	.5272
40, 5 & 10	.487	.513
40 & 7½	.445	.555
40, 7½ & 2½	.4589	.5411
40, 7½ & 5	.4728	.5272
40, 7½ & 7½	.4866	.5134
40, 7½ & 10	.5005	.4995
40 & 10	.46	.54
40, 10 & 2½	.4735	.5265
40, 10 & 5	.487	.513
40, 10 & 7½	.5005	.4995
40, 10 & 10	.514	.486
40 & 20	.52	.48
40, 20 & 2½	.532	.468
40, 20 & 5	.544	.456
40, 20 & 7½	.556	.444
40, 20 & 10	.568	.432
40, 20 & 20	.616	.384
42½	.425	.575
42½ & 2½	.4394	.5606
42½, 2½ & 2½	.4534	.5466
42½, 2½ & 5	.4674	.5326
42½, 2½ & 7½	.4814	.5186
42½, 2½ & 10	.4954	.5046
42½ & 5	.4538	.5462
42½, 5 & 2½	.4674	.5326
42½, 5 & 5	.4811	.5189
42½, 5 & 7½	.4947	.5053
42½, 5 & 10	.5084	.4916
42½ & 7½	.4681	.5319
42½, 7½ & 2½	.4814	.5186
42½, 7½ & 5	.4947	.5053
42½, 7½ & 7½	.508	.492
42½, 7½ & 10	.5213	.4787
42½ & 10	.4825	.5175
42½, 10 & 2½	.4954	.5046
42½, 10 & 5	.5084	.4916
42½, 10 & 7½	.5213	.4787
42½, 10 & 10	.5343	.4657
42½ & 20	.54	.46
42½, 20 & 2½	.5515	.4485
42½, 20 & 5	.563	.437
42½, 20 & 7½	.5745	.4255
42½, 20 & 10	.586	.414
42½, 20 & 20	.632	.368
45	.45	.55
45 & 2½	.4638	.5362
45, 2½ & 2½	.4772	.5228
45, 2½ & 5	.4906	.5094
45, 2½ & 7½	.504	.496
45 2½ & 10	.5174	.4826
45 & 5	.4775	.5225
45, 5 & 2½	.4906	.5094
45, 5 & 5	.5036	.4964
45, 5 & 7½	.5167	.4833
45, 5 & 10	.5298	.4702
45 & 7½	.4913	.5087
45, 7½ & 2½	.504	.496
45, 7½ & 5	.5167	.4833
45, 7½ & 7½	.5294	.4706
45, 7½ & 10	.5421	.4579
45 & 10	.505	.495
45, 10 & 2½	.5174	.4826
45, 10 & 5	.5298	.4702
45, 10 & 7½	.5421	.4579
45, 10 & 10	.5545	.4455
45 & 20	.56	.44
45, 20 & 2½	.571	.429
45, 20 & 5	.582	.418
45, 20 & 7½	.593	.407
45, 20 & 10	.604	.396
45, 20 & 20	.648	.352
47½	.475	.525
47½ & 2½	.4881	.5119
47½, 2½ & 2½	.5009	.4991
47½, 2½ & 5	.5237	.4863
47½, 2½ & 7½	.5265	.4735
47½, 2½ & 10	.5393	.4607
47½ & 5	.5013	.4987
47½, 5 & 2½	.5137	.4863
47½, 5 & 5	.5262	.4738
47½, 5 & 7½	.5386	.4614
47½, 5 & 10	.5511	.4489
47½ & 7½	.5144	.4856
47½, 7½ & 2½	.5265	.4735
47½, 7½ & 5	.5387	.4613
47½, 7½ & 7½	.5508	.4492
47½, 7½ & 10	.5629	.4371
47½ & 10	.5275	.4725
47½, 10 & 2½	.5393	.4607
47½, 10 & 5	.5511	.4489
47½, 10 & 7½	.5629	.4371
47½, 10 & 10	.5748	.4252
47½ & 20	.58	.42
47½, 20 & 2½	.5905	.4095
47½, 20 & 5	.601	.399
47½, 20 & 7½	.6115	.3885
47½, 20 & 10	.622	.378
47½, 20 & 20	.664	.336
50	.50	.50
50 & 2½	.5125	.4875
50, 2½ & 2½	.5247	.4753
50, 2½ & 5	.5369	.4631
50, 2½ & 7½	.5491	.4509
50, 2½ & 10	.5613	.4387
50 & 5	.525	.475
50, 5 & 2½	.5369	.4631
50, 5 & 5	.5488	.4512
50, 5 & 7½	.5606	.4394
50, 5 & 10	.5725	.4275
50 & 7½	.5375	.4625
50, 7½ & 2½	.5491	.4509
50, 7½ & 5	.5606	.4394
50, 7½ & 7½	.5722	.4278
50, 7½ & 10	.5838	.4162
50 & 10	.55	.45
50, 10 & 2½	.5613	.4387
50, 10 & 5	.5725	.4275
50, 10 & 7½	.5838	.4162
50, 10 & 10	.595	.405
50 & 20	.60	.40
50, 20 & 2½	.61	.39
50, 20 & 5	.62	.38
50, 20 & 7½	.63	.37
50, 20 & 10	.64	.36
50, 20 & 20	.68	.32
52½	.525	.475

Illumineering Information . . . .

Don't buy lighting equipment promiscuously!!!

The material and fixtures for any lighting job, large or small, should be selected only after a careful on-the-spot analysis of the particular tasks or operations for which more lighting — good lighting is desired.

As a distributor of lamps and first-class wiring and lighting equipment we are prepared to have a trained lighting specialist advise you on the type of lighting installation that will deliver the *right kind and quality of light*, at the right place, and in the *right intensities*, to permit the most efficient performance and — at lowest possible cost of installation consistent with good quality.

For your convenience, we have included in this catalog under the heading ILLUMINEERING INFORMATION a group of pages that present the most significant and important FACTS and FIGURES on MODERN LIGHTING. That material was published and copyrighted by the nationally recognized authority on lighting — the Illuminating Engineering Society, and is reproduced by special permission.

TYPICAL LIGHTING INSTALLATIONS



This shipping area, approximately 30 x 30 feet, has 3-lamp lowered troughs, 7 feet in center recessed in 10-foot high ceiling. Standard cool white flourescent lamps provide 60 footcandles.

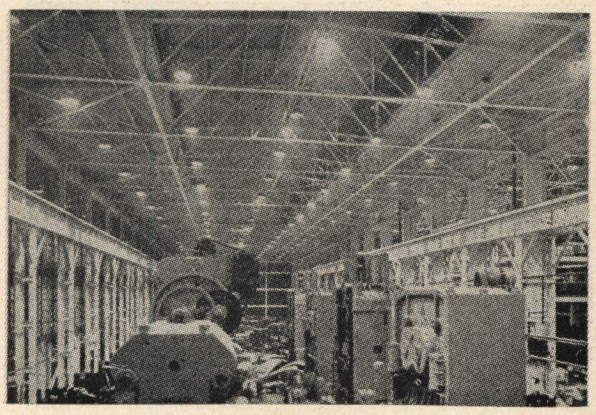


Figure 17. (top) Press shop, 70 x 250 feet, 35 feet to bottom of tresses has 400-watt mercury reflectors with AH1 mercury lamps mounted 35 feet above floor on 14 x 14 foot centers. Illumination averages 30 footcandles.

ILLUMINEERING INFORMATION

INDUSTRIAL LIGHTING

Excerpts from the booklet entitled "American Standard Practice for Industrial Lighting" as sponsored by the *Illuminating Engineering Society* and approved by the *American Standards Association*. Reprinted here with the permission of the *Illuminating Engineering Society, Inc.*

INTRODUCTION

The purposes of industrial lighting are to help provide a safe working environment, to provide efficient and comfortable seeing as an aid to all types of industrial operation, and to aid in the conservation of vision and energy. It is important, therefore, to analyze the several factors which contribute to seeing; that is the task, the environment, and the lighting. While in practice these factors are closely inter-related, they are for practical considerations individually treated in this publication.

ARTIFICIAL LIGHTING

To maintain good seeing conditions artificial lighting must be supplied for most industrial areas since an insufficient quantity of daylight is available even under optimum daylight conditions. With natural lighting the space along the windows has the most light, while with artificial lighting this space too often has the least light. If there are benches and machines close to the windows, it is essential that the artificial lighting be so designed and installed as to continue the general level of illumination close up to the windows and walls, thus insuring good lighting over the entire working area of the room.

The general lighting should be quite uniform so that the light will be available when needed at any point in the room. The manner in which the light from the lamps is controlled by the lighting equipment governs to a large extent the important effects of glare, shadows, distribution and diffusion. Luminaires are classified in accordance with the way in which they control the light.

LIGHTING METHODS FOR INDUSTRIAL AREAS

Introduction—A mere abundance of light does not constitute good lighting. To provide satisfactory shop illumination three main conditions must be met:

(1) Quantity of illumination must be sufficient for all visual tasks (tables 1 and II).

(2) Quality of lighting must be in accordance with the seeing requirement (Section 2.2.3).

(3) Lighting systems, painting of interior surfaces, machines, etc. should help provide a proper environment for the working interior (Section 2.3).

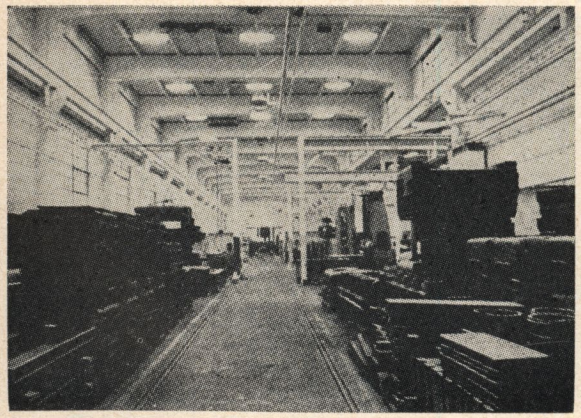


Figure 18. *(center) Machinery heavy castings room is approximately* 50 *x* 300 *feet with 35-foot ceiling height.* 3000*-watt mercury reflectors are mounted* 35 *feet above the floor on* 17 *x* 20*-foot centers. Illumination is* 110 *footcandles. Note: extra shielding is provided by deep trusses finished in white. Ceiling and sidewalls are white.*

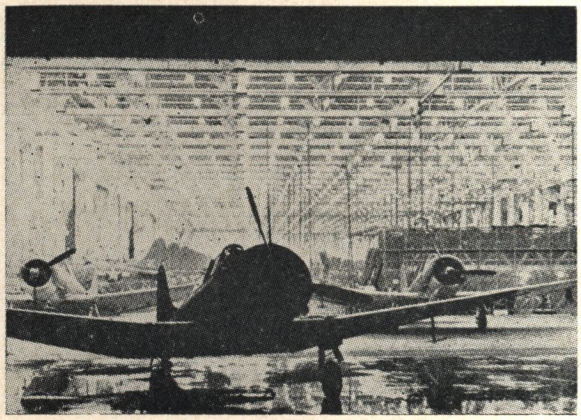


Figure 19. *(bottom) Airplane assembly plant is illuminated by* 400*-watt mercury and* 500*-watt incandescent filament lamps alternately spaced in high-bay concentrating reflectors. Average illumination is* 34 *footcandles. Note the low brightness ratios inside the plant. (Photo taken from rain-covered apron outdoors.)*

The proper method of lighting a specific area is also dependent upon the size and proportions of the room.

General—(a) Modern industrial lighting practice requires the establishment of a base or minimum quantity of light throughout the room. This is termed general lighting. The quantity may vary depending upon the purpose for which the space is to be used. If visual tasks are particularly severe, much higher illumination over restricted areas can be added to this base. This additional light, known as supplementary lighting, is usually provided by luminaires placed relatively close to the area being illuminated.

(b) The general lighting system usually consists of luminaires placed ten feet or more above the floor. The purpose of the general lighting system is to provide sufficient light for most seeing tasks and promote safety and plant protection.

(c) Where supplementary lighting is necessary the general lighting should keep the brightness difference between the well-lighted immediate work area and the surroundings within the ranges specified in Table III.

Low-Bay Areas—(a) In rooms relatively wide and long in proportion to the height, a spread type of direct lighting equipment is usually applicable. (Rooms of this category have a width greater than three times the height.) Here good quality illumination is provided by fluorescent luminaires mounted in continuous rows, spaced to give the proper quantity and distribution of light (Figs. 13 and 14).

(b) The use of continuous rows of fluorescent units run at right angles, forming a grid or checkerboard pattern, provides higher levels of illumination, reduces shadows, and assures more even brightness of machine dials, regardless of the angle at which these dials may be placed (Fig. 15).

(c) If the floors and machinery are high in reflectance they will reflect some of the light back to the ceiling. This relieves the brightness difference between the lighting equipment and its surroundings. Seeing conditions are usually improved markedly and there is also a very noticeable improvement in the appearance of the room. This is further improved if the ceiling and all equipment also have high reflectance. These desirable effects can be increased by using spread types of direct lighting equipments which are so constructed as to provide some upward light; such units approach the semi-direct classification (Fig. 16).

High-Bay Narrow Interior—In areas where the width is equal to or less than the height (Fig. 17), direct lighting equipment which concentrates the light is usually used in order to provide efficiently the necessary illumination at the working plane. Usually incandescent or mercury vapor sources are used for this application either alone or in combination (Fig. 18). Mercury lamps have the advantage of longer life and higher efficiency. When the two types of sources are used together the filament lamps supply an excess of red light to offset the deficiency in red of the mercury, the result being a synthetic "white" widely employed for industrial areas. Also the use of combination systems alleviates the problem created by temporary power interruptions since the mercury lamps do not restart for several minutes. Percentages of the two usually range from equal quantities of the mercury and filament light to twice as much mercury light as filament.

High-Bay Wide Interior—Some of the newer manufacturing areas, notably airplane assembly plants and similar spaces, are enormous in both length and width, while at the same time the ceiling height is very great, with the added requirement that there must be clear space up to 30 or 40 feet or sometimes even more. Concentrating types or direct lighting equipment can be used, mounted on appropriate spacings to provide the quantity of illumination required (Fig. 19). However, because of the extreme width and length, spread types of direct lighting equipments can be used to good advantage with a large number of luminaires each contributing a small amount of light to any given point. This reduces shadows to a minimum and gives higher vertical surface illumination. With fluorescent units the effect approaches that of indirect lighting. These fluorescent luminaires are preferably mounted in continuous rows, which simplifies installation and wiring (Fig. 20). Various means have been used to suspend the rows and maintain a straight, neat appearance; one example is a system of messenger cables with supporting cables or rods hung at intervals from the ceiling.

Non-Productive and Service Areas—In areas where work is primarily of a non-productive nature, such as warehousing, boiler and pump rooms, freight elevators, washrooms, lockers, corridors . . . etc., the lighting requirement is usually one of providing reasonable diffusion, comfort, and appearance with a minimum of cost (Figs. 21 and 22). For these types of areas where but little light (5 to 10 footcandles) is necessary, the requirements can be met with incandescent lamps in direct (spread) equipment or in semi-direct units. Where better appearance is a factor or where a higher level of illumination is necessary, or both, as in active warehousing, packing of small articles or for export . . . etc., it is desirable to use direct or semi-direct fluorescent equipment. For example, in a warehouse where the work approaches continuous-line operation, continuous rows of fluorescent reflectors of the direct type can be mounted over the work areas with good results.

Localized General Lighting—Many industrial plants have machinery of such a nature and so located that a uniform intensity of illumination is not necessary throughout the area. Luminaires may be mounted above the visual task, supplying adequate levels of illumination at the particular work points and at the same time providing sufficient illumination for adjacent areas. Fig. 23 shows an example of localized general lighting.

ILLUMINEERING INFORMATION

INDUSTRIAL LIGHTING

American Standard Practice: SPONSORED by the Illuminating Engineering Society, APPROVED by the American Standards Association, Inc., REPRODUCED here by permission of the SPONSOR.

Specific Recommended Values of Illumination in Footcandles on Task or 30″ Above Floor.†

AIRPLANE MANUFACTURING:	
Stock Parts —	
Production	50
Inspection	100
Parts Manufacturing —	
Drilling, Riveting and Screw Fastening	30
Spray Booths	30
Sheet Aluminum Layout and Template Work; Shaping and Smoothing of Small Parts for Fuselage; Wing Sections, Cowling, etc.	50
Welding —	
General Illumination	30
Supplementary Illumination	1000
Sub-Assembly —	
Landing Gear, Fuselage, Wing Sections, Cowling and Other Large Units	30
Final Assembly —	
Placing of Motors, Propellers, Wing Sections and Landing Gear	30
Inspection of Assembled Ship and its Equipment	50
Machine Tool Repairs	100
ASSEMBLY:	
Rough	20
Medium	50
Fine	100
Extra Fine	300*
AUTOMOBILE MANUFACTURING:	
Assembly Line	100
Frame Assembly	30
Body Manufacturing —	
Parts	30
Assembly	30
Finishing and Inspecting	200*
BAKERIES (From I.E.S. Report "Lighting for Bakeries"):	
Mixing Room	20
Face of shelves (vertical illumination)	10
Inside of mixing bowl (vertical mixers)	50*
Fermentation Room	10
Make-up Room	
Bread	20
Sweet yeast raised products	30
Proofing Room	10
Oven Room	20
Fillings and Other Ingredients	30
Decorating and Icing	
Mechanical	20
Hand	50*
Scales and Thermometers	30
Wrapping Room	20
Storage Room	10
Shipping Room	20
Reception Rooms	30
Washrooms, Stairways	30
Halls, Corridors, Passageways	
BOOK BINDING:	
Folding, Assembling, Pasting, etc.	20
Cutting, Punching and Stitching	30
Embossing	30
BREWERIES:	
Brew House	5
Boiling, Keg Washing and Filling	10
Bottling	20
BUILDING:	
Construction	10
Excavation Work	2
CANDY MAKING:	
Box Department	20
Chocolate Department —	
Husking, Winnowing, Fat Extraction, Crushing and Refining, Feeding	10
Bean Cleaning and Sorting, Dipping, Packing, Wrapping	20
Milling	50
Cream Making —	
Mixing, Cooking and Molding	20
Gum Drops and Jellied Forms	20
Hand Decorating	50
Hard Candy —	
Mixing, Cooking and Molding	20
Die Cutting and Sorting	50
Kiss Making and Wrapping	50
Special Holiday Candy—Hand Decorating	50
CANNING AND PRESERVING (From I.E.S. Report "Lighting for Canneries"):	
Receiving	
Grading Raw Material Samples	20
Tomatoes	100
Color Grading (Cutting Rooms)	100*
Preparation	
Preliminary Sorting	
Apricots and Peaches	50
Tomatoes	100
Olives	125
Cutting and Pitting	35
Final Sorting	100
Canning	
Continuous Belt Canning	100
Sink Canning	100
Hand Packing	20
Olives	50
Examination of Canned Samples	150*
Container Handling	
Inspection	150***
Can Unscramblers	10***
Labeling and Cartoning	20
Storage Warehouses	5
CHEMICAL WORKS:	
Hand Furnaces, Boiling Tanks, Stationary Driers, Stationary and Gravity Crystallizers	5
Mechanical Furnaces, Generators and Stills, Mechanical Driers, Evaporators, Filtration, Mechanical Crystallizers, Bleaching	10
Tanks for Cooking, Extractors, Percolators, Nitrators, Electrolytic Cells	20
CLAY PRODUCTS AND CEMENTS:	
Grinding, Filter Presses, Kiln Rooms	5
Molding, Pressing, Cleaning and Trimming	20
Enameling	30
Color and Glazing	30
CLEANING AND PRESSING INDUSTRY:	
Checking and Sorting	20
Dry and Wet Cleaning and Steaming	10
Inspection and Spotting	150
Pressing —	
Machine	30
Hand	50
Receiving and Shipping	10
Repair and Alteration	150
CLOTH PRODUCTS:	
Cutting, Inspecting, Sewing —	
Light Goods	30
Medium Goods	100
Dark Goods	300*
Pressing, Cloth Treating (Oil Cloth, etc.) —	
Light Goods	30
Medium Goods	50
Dark Goods	100
COAL TIPPLES AND CLEANING PLANTS:	
Breaking, Screening and Cleaning	10
Picking	300*
CONSTRUCTION — INDOOR:	
General	10
CORRIDORS	5
CONTROL ROOMS:	
Vertical Face of Switchboards —	
Simplex or Section of Duplex Facing Operator, Type A — Large Centralized Control Room 66 Inches Above Floor	50
Type B — Ordinary Control Rooms at 66 Inches Above Floor	30
Section of Duplex Facing Away from Operator	25
Bench Boards (Horizontal Level)	30
Area Inside Duplex Switchboards (Horizontal, 1 Foot Above Floor)	5
Rear of All Switchboard Panels (Vertical)	10
Emergency Lighting, All Areas	3
DAIRY PRODUCTS:	
Fluid Milk Industry—	
Boilers	10
Bottle Storage	10
Bottle Sorting	50
Bottle Washers	300***
Can Washers	20
Cooling Equipment	20
Filling: Inspection	50
Gages	30
Laboratories	50
Loading Platforms	10
Meter Panels	30
Pasteurizers	20
Receiving Room	20
Scales	30
Separators	20
Storage Refrigerator	10
Tanks	
Light Interiors	10
Dark Interiors	100
Thermometer	30
Vats	50
Weighing Room	10
DISPATCH ROOMS:	
Horizontal Plane (Desk Level)	50
Vertical Face of Board (48 Inches Above Floor, Facing Operator)	
System Load Dispatch Room	50
Secondary Dispatch Room	30
ELECTRICAL EQUIPMENT MANUFACTURING:	
Impregnating	30
Insulating: Coil Winding	100
Testing	50
ELEVATORS — FREIGHT AND PASSENGER	10
ENGRAVING (WAX)	100*

SPECIFIC RECOMMENDED VALUES OF ILLUMINATION IN FOOTCANDLES ON TASK OR 30″ ABOVE FLOOR.†

CONT'D

EXPLOSIVES:	
Hand Furnaces, Boiling Tanks, Stationary Driers, Stationary and Gravity Crystallizers	
Mechanical Furnaces, Generators and Stills, Mechanical Driers, Evaporators, Filtration, Mechanical Crystallizers	10
Tanks for Cooking, Extractors, Percolators, Nitrators	20
EXTERIOR AREAS:	
Boundaries —	
Glare Projection Technique (Isolated)	.15
General Lighting Technique (Non-Isolated)	.2
Entrances —	
Active (Pedestrian and/or Conveyance)	2.0
Inactive (Normally Locked, Infrequently Used)	.5
Vital Locations or Structures	2.0
Building Surrounds	.5
Active Shipping Area Surrounds	2.0
General Inactive Areas	.2
Yards (General)	2.0
Loading and Unloading Platforms	5.0
FLOUR MILLS (From I.E.S. Report "Lighting for Flour Mills"):	
Rolling	40
Sifting	40
Purifying	40
Packing	30
Product Control	40
Cleaning Screens, Man Lifts, Aisleways and Walkways, Bin Inspection	20
FORGE SHOPS (AND WELDING)	10
FOUNDRIES:	
Annealing (furnaces)	10
Cleaning	20
Core making (fine)	50
Core making (medium)	25
Grinding and chipping	30**
Inspection (fine)	100
Inspection (medium fine)	50
Inspection (medium)	30
Moulding (medium)	50
Moulding (large)	30
Pouring	10
Sorting	10
Storage	10
Shipping and receiving	30
Cupola	10
Shakeout	10
GARAGES — AUTOMOBILE AND TRUCK:	
Storage — Live	10
Storage — Dead	2
Repair Department and Washing (Pits or Lifts)	50
GLASS WORKS:	
Mix and Furnace Rooms, Pressing and Lehr, Glass Blowing Machines	10
Grinding, Cutting Glass to Size, Silvering	30
Fine Grinding, Polishing, Beveling, Etching and Decorating	50
Inspection	100
GLOVE MANUFACTURING:	
Pressing, Knitting, Sorting —	
Light Goods	20
Medium Goods	50
Dark Goods	100
Cutting, Stitching, Trimming, Inspection —	
Light Goods	30
Medium Goods	100
Dark Goods	200*
HALLWAYS, CORRIDORS AND PASSAGEWAYS	5
HANGARS — AIRPLANE:	
Storage — Live	10
Repair and Servicing	50
HAT MANUFACTURING:	
Dyeing, Stiffening, Braiding, Cleaning and Refining —	
Light	20
Medium	50
Dark	100
Forming, Sizing, Pouncing, Flanging, Finishing and Ironing —	
Light	30
Medium	50
Dark	100
Sewing —	
Light	30
Medium	100
Dark	200*
ICE MAKING — ENGINE AND COMPRESSOR ROOM	10
INSPECTION:	
Rough	20
Medium	50
Fine	100
Extra Fine	200*
IRON AND STEEL MANUFACTURING (From I.E.S. Report "Lighting for Steel Mills — Part I — Open Hearth"):	
Open Hearth —	
Stock Yard	5
Charging Floor	10
Pouring Slide	
Slag Pits	20
Control Platforms	20
Mold Yard	5
Hot Top	20
Hot Top Storage	10
Checker Cellar	5**
Buggy and Door Repair	20
Stripping Yard	10
Scrap Stockyard	10
Mixer Building	20
Calcining Building	10
Skull Cracker	5
Cinder Dump	5
JEWELRY AND WATCH MANUFACTURING	200*
LAUNDRIES:	
Washing	
Flatwork Ironing, Weighing, Listing and Marking	20
Machine and Press Finishing, Sorting	20
Fine Hand Ironing	30
	50
LEATHER MANUFACTURING:	
Vats	5
Cleaning, Tanning and Stretching	10
Cutting, Fleshing and Stuffing	20
Finishing and Scarfing	30
LEATHER WORKING:	
Pressing, Winding and Glazing —	
Light	30
Medium	50
Dark	100
Grading, Matching, Cutting, Scarfing, Sewing —	
Light	30
Medium	100
Medium	200*
LOCKER ROOMS	10
MACHINE SHOPS:	
Rough Bench and Machine Work	20
Medium Bench and Machine Work, Ordinary Automatic Machines, Rough Grinding, Medium Buffing, and Polishing	50
Fine Bench and Machine Work, Fine Automatic Machines, Medium Grinding, Fine Buffing and Polishing	100
Extra Fine Bench and Machine Work, Grinding — Fine Work	200*
MEAT PACKING:	
Slaughtering	10
Cleaning, Cutting, Cooking, Grinding, Canning, Packing	20
OFFICES:	
Difficult Seeing Tasks	50
Auditing and Accounting	
Business Machine Operation	
Transcribing and Tabulation	
Bookkeeping	
Drafting	
Designing	
Ordinary Seeing Tasks	30
General Office Work (except for work coming under "Difficult Seeing Tasks" above)	
Private Office Work	
General Correspondence	
Conference Rooms	
Active File Rooms	
Mail Rooms	
Casual Seeing Tasks	10
Inactive File Rooms	
Reception Rooms	
Stairways	
Washrooms, and other Service Areas	
Simple Seeing Tasks	5
Hallways and Corridors	
Passageways	
PACKING AND BOXING	10
PAINT MANUFACTURING:	
General	20
Comparing Mix with Standard	100**
PAINT SHOPS:	
Dipping, Simple Spraying, Firing	20
Rubbing, Ordinary Hand Painting and Finishing Art, Stencil and Special Spraying	20
Fine Hand Painting and Finishing	50
Extra Fine Hand Painting and Finishing (Automobile Bodies, Piano Cases, etc.)	100***
PAPER BOX MANUFACTURING:	
Light	20
Dark	50
Storage	5
PAPER MANUFACTURING:	
Beaters, Grinding, Calendering	10
Finishing, Cutting, Trimming Paper-Making Machines	20
Hand Counting, Wet End of Paper Machine	30
Paper Machine Reel, Paper Inspection and Laboratories	50
Rewinder	100
Storage	5
PLATING	10
POLISHING AND BURNISHING	20
POWER PLANTS, ENGINE ROOM, BOILERS:	
Boilers, Coal and Ash Handling, Storage Battery Rooms	5
Auxiliary Equipment, Oil Switches and Transformers	20
Engines, Generators, Blowers, Compressors	20
Switchboards	30†
PRINTING INDUSTRIES:	
Type Foundries —	
Matrix Making, Dressing Type	100
Font Assembly — Sorting	50
Hand Casting	30
Machine Casting	20
Printing Plants —	
Color Inspection	100*
Machine Composition	100*
Presses	30
Imposing Stones	100***
Proof Reading	100
Electrotyping —	
Molding, Finishing, Leveling Molds, Routing, Trimming	100
Blocking, Tinning	30
Electroplating, Washing, Backing	20
Photo Engraving —	
Etching, Staging	20
Blocking	30
Routing, Finishing Proofing	50
Tint Laying	100
Masking	100

SPECIFIC RECOMMENDED VALUES OF ILLUMINATION IN FOOTCANDLES ON TASK OR 30″ ABOVE FLOOR.†

RECEIVING AND SHIPPING	20
RUBBER TIRE AND TUBE MANUFACTURING:	
Stock Preparation —	
Bradbury	20
Plasticating	20
Milling	20
Calendering	30
Fabric Preparation —	
Stock Cutting	30
Bead Building	30
Tube Tubing Machines	20
Tread Tubing Machines	20
Tire Building —	
Solid Tire	20
Pneumatic Tire	50
Curing Department —	
Tube Curing	50
Casing Curing	50
Final Inspection —	
Tube	50
Casing	100
Wrapping	20
Warehouse	5
RUBBER GOODS — MECHANICAL:	
Stock Preparation —	
Plasticating	20
Milling	20
Calendering	30
Bradbury	20
Fabric Preparation —	
Stock Cutting	30
Hose Looms	30
Molded Products and Curing	50
Extruded Products	30
Inspection	100
Boxing	20
Warehouse	5
SHEET METAL WORKS:	
Miscellaneous Machines, Ordinary Bench Work	20
Presses, Shears, Stamps, Spinning, Medium Bench Work	20
Punches	25
Tin Plate Inspection	50
Scribing	100***
SHIP YARDS:	
General	5
Ways and Fabrication Areas	10
SHOE MANUFACTURING (LEATHER):	
Cutting and Stitching —	
Cutting Tables	20
Marking, Buttonholing, Skiving, Sorting, Vamping and Counting —	
Light Materials	20
Dark Materials	100
Stitching —	
Light Materials	30
Dark Materials	200*
Making and Finishing —	
Stitchers, Nailers, Sole Layers, Welt Beaters and Scarfers, Trimmers, Welters, Lasters, Edge Setters, Sluggers, Randers, Wheelers, Treers, Cleaning, Spraying, Buffing, Polishing, Embossing —	
Light Materials	20
Dark Materials	100
Storage, Packing and Shipping	10
SHOE MANUFACTURING (RUBBER):	
Washing, Coating, Mill Run Compounding	10
Varnishing, Vulcanizing, Calendering, Upper and Sole Cutting	30
Sole Rolling, Lining, Making and Finishing Processes	50
SOAP MANUFACTURING:	
Kettle Houses, Cutting, Soap Chip and Powder	10
Stamping, Wrapping and Packing, Filling and Packing Soap Powder	20
STAIRWAYS, RECEPTION ROOMS, WASHROOMS AND OTHER SERVICE AREAS	10
STONE CRUSHING AND SCREENING:	
Belt Conveyor Tubes, Main Line Shafting Spaces, Chute Rooms Inside of Bins	5
Primary Breaker Room, Auxiliary Breakers under Bins	5
Screens	10
STORAGE BATTERY MANUFACTURING:	
Molding of Grids	20
STORAGE ROOMS:	
Inactive	5
Active	5
Rough Bulky	10
Medium	20
Fine	10
STRUCTURAL STEEL FABRICATION	
SUGAR REFINING:	
Grading	30
Color Inspection	100
SWITCHBOARDS (See Control Rooms)	
TESTING:	
Rough	20
Fine	30
Extra Fine Instruments, Scales, etc.	100
TEXTILE MILLS (COTTON):	
Opening, Mixing, Picking	15
Carding and Drawing	25
Slubbing, Roving, Spinning and Spooling	20
Beaming and Slashing on Comb —	
Grey Goods	20
Denims	50
Inspection —	
Grey Goods (Hand Turning)	50
Denims (Rapidly Moving)	100**
Automatic Tying-in	100
Drawing-in by Hand	100**
Weaving	50
TEXTILE MILLS (SILK AND RAYON):	
Manufacturing —	
Soaking, Fugitive tinting, and Conditioning or Setting of Twist	10
Winding, Twisting, Rewinding, and Coning, Quilling, Slashing	
Light Thread	30
Dark Thread	70
Warping (Silk or Cotton System) on Creel, on Running Ends, on Reel, on Beam, on Warp at Beaming	50
Drawing-in —	
On Heddles	100
On Reed	100
Weaving —	
On Heddles and Reeds	10
On Warp Back of Harness	20
On Woven Cloth	30
TEXTILE MILLS (WOOLEN AND WORSTED) (From I.E.S. Report "Lighting for Woolen and Worsted Textile Mills"):	
Opening	15
Grading	100*
Blending	15
Picking	15
Carding (Add an internal unit)	35
Combing	35
Recombing	35
Gilling	35
Drawing (white)	25
Drawing (colored)	50
Spinning (Frame) (White)	25
" " (Colored)	50
Spinning (Mule) (White)	20
" " (Colored)	40
Twisting (White)	25
Winding (White)	20
" (Colored)	40
Warping (White)	20
" " (at Reed)	75*
Warping (Colored)	40
" " (at Reed)	75*
Weaving (White)	40
" (Colored)	80
Grey Goods Room —	
Burling	100*
Sewing	200*
Folding	40
Wet Finishing —	
Fulling	25
Scouring	25
Crabbing	25
Drying	25
Dyeing	100*
Dry Finishing —	
Napping	40
Shearing	100*
Conditioning	40
Pressing	40
Inspecting (Perching)	300
Folding	40
TOBACCO PRODUCTS:	
Drying, Stripping, General	10
Grading and Sorting	100
TOILETS AND WASH ROOMS	10
UPHOLSTERING — AUTOMOBILE, COACH FURNITURE	30
WAREHOUSE	5
WASHROOMS	10
WELDING:	
General Illumination	30
Supplementary Illumination	1000
WOODWORKING:	
Rough Sawing and Bench Work	30
Sizing, Planing, Rough Sanding, Medium Machine and Bench Work, Glueing, Veneering, Cooperage	50
Fine Bench and Machine Work, Fine Sanding and Finishing	100

* Obtained with a combination of general lighting plus specialized supplementary lighting. Care should be taken to keep within the general brightness ratios.

** These seeing tasks generally involve the discrimination of fine detail for long periods of time and under conditions of poor contrast. To provide the required illumination, a combination of the general lighting indicated plus specialized supplementary lighting is necessary. The design and installation of the combination system must not only provide a sufficient amount of light, but also the proper direction of light, diffusion, and eye protection. As far as possible it should eliminate direct and reflected glare as well as objectionable shadows.

*** Special lighting such that (1) the luminous area shall be large enough to cover the surface which is being inspected and (2) the brightness be within the limits necessary to obtain comfortable contrast conditions. This involves the use of sources of large area and relatively low brightness in which the source brightness is the principal factor rather than the footcandles produced at a given point.

† The footcandle recommendations may change as a result of a number of studies now underway. It is desirable to consult specific study reports at the time of design.

ILLUMINEERING INFORMATION

American Standard Practice for INDUSTRIAL LIGHTING

SPONSORS

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TABLE VI.—Classification of Visual Tasks and Lighting Techniques.

PART I — FLAT SURFACES

Classification of Visual Task	Example		Lighting Technique	
General Characteristics	Description	Lighting Requirements	Luminaire Type	Locate Luminaire
A. Opaque Materials				
1. Diffuse detail & background				
a. Unbroken surface	Newspaper proof reading	High visibility with comfort	S-III or S-II	To prevent direct glare & shadows (Fig. 28a)
b. Broken surface	Scratch on unglazed tile	To emphasize surface break	S-I	To direct light obliquely to surface (Fig. 28c)
2. Specular detail & background				
a. Unbroken surface	Dent, warps, uneven surface	Emphasize unevenness	S-V	So that image of source & pattern is reflected to eye (Fig. 28d)
b. Broken surface	Scratch, scribe, engraving, punch marks	Create contrast of cut against specular surface	S-III	So detail appears bright against a dark background
			or S-IV or V when not practical to orient task	So that image of source is reflected to eye & break appears dark (Fig. 28d)
c. Specular coating over specular background	Inspection of finish plating over under plating	To show up uncovered spots	S-IV with color of source selected to create maximum color contrast between two coatings	For reflection of source image toward the eye (Fig. 28d)
3. Combined specular & diffuse surfaces				
a. Specular detail on diffuse, light background	Shiny ink or pencil marks on dull paper	To produce maximum contrast without reflected glare from shiny markings	S-III or S-IV	So direction of reflected light does not coincide with angle of view (Fig. 28a)
b. Specular detail on diffuse, dark background	Punch or scribe marks on dull metal	To create bright reflection from detail	S-II or S-III	So direction of reflected light from detail coincides with angle of view (Fig. 28b)
c. Diffuse detail on specular, light background	Graduations on a steel scale	To create a uniform, low brightness reflection from specular background	S-IV or S-III	So reflected image of source coincides with angle of view (Fig. 28b or d)
d. Diffuse detail on specular, dark background	Wax marks on auto body	To produce high brightness of detail against dark background	S-III or S-II	So direction of reflected light does not coincide with angle of view (Fig. 28a)
B. Translucent Materials				
1. With diffuse surface	Frosted or etched glass or plastic, light weight fabrics, hosiery	Maximum visibility of surface detail	Treat as opaque, diffuse surface—See A-1	
		Maximum visibility of detail within material	Trans-illuminate behind material with S-II, S-III or S-IV (Fig. 28e)	
2. With specular surface	Scratch on opal glass or plastic	Maximum visibility of surface detail	Treat as opaque, specular surface—See A-2	
		Maximum visibility of detail within material	Trans-illuminate behind material with S-II, S-III or S-IV (Fig. 28e)	
C. Transparent Materials				
Clear material with specular surface	Plate glass	To produce visibility of details within material such as bubbles & details on surface such as scratches	S-V and S-I	Transparent material should move in front of Type S-V, then in front of black background with Type S-I directed obliquely. Type S-I should be directed to prevent reflected glare.
D. Transparent over Opaque Materials				
1. Transparent material over diffuse background	Instrument panel	Maximum visibility of scale & pointer without reflected glare	S-I	So reflection of source does not coincide with angle of view (Fig. 28a)
	Varnished desk top	Maximum visibility of detail on or in transparent coating or on diffuse background		
		Emphasis of uneven surface	S-V	So that image of source & pattern is reflected to the eye (Fig. 28d)
2. Transparent material over specular background	Glass mirror	Maximum visibility of detail on or in transparent material	S-I	So reflection of source does not coincide with angle of view. Mirror should reflect a black background (Fig. 28a)
		Maximum visibility of detail on specular background	S-V	So that image of source & pattern is reflected to the eye (Fig. 28d)

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American Standard Practice for INDUSTRIAL LIGHTING

Classification of Visual Tasks and Lighting Techniques

(CONTINUED)

PART II — THREE DIMENSIONAL OBJECTS

Classification of Visual Task	Example		Lighting Technique	
General Characteristics	Description	Lighting Requirements	Luminaire Type	Locate Luminaire
A. Opaque Materials				
1. Diffuse detail & background	Dirt on a casting or blow holes in a casting	To emphasize detail with a poor contrast	S-I[1]I or S-II	To prevent direct glare & shadows (Fig. 28a)
			or	
			S-I	In relation to task to emphasize detail by means of highlight & shadow (Fig. 28b or c)
			or	
			S-III or S-II as a black light source when object has a fluorescent coating	To direct ultra-violet radiation to all points to be checked
2. Specular detail & background				
a. Detail on the surface	Dent on silverware	To emphasize surface unevenness	S-V	To reflect image of source to eye (Fig. 28d)
	Inspection of finish plating over under plating	To show up areas not properly plated	S-IV plus proper color	To reflect image of source to eye (Fig. 28d)
b. Detail in the surface	Scratch on a watch case	To emphasize surface break	S-IV	To reflect image of source to eye (Fig. 28d)
3. Combination specular & diffuse				
a. Specular detail on diffuse background	Scribe mark on casting	To make line glitter against dull background	S-III or S-II	In relation to task for best visibility. Adjustable equipment often helpful
				Overhead to reflect image of source to eye (Fig. 28b or d)
b. Diffuse detail on specular background	Micrometer scale	To create luminous background against which scale markings can be seen in high contrast	S-IV or S-III	With axis normal to axis of micrometer
	Coal picking	To make coal glitter in contrast to dull impurities	S-I, S-II	To prevent direct glare (Fig. 28b)
B. Translucent Materials				
1. Diffuse surface	Lamp shade	To show imperfections in material	S-II	Behind or within for trans-illumination (Fig. 28e)
2. Specular surface	Glass enclosing globe	To emphasize surface irregularities	S-V	Overhead to reflect image of source to eye (Fig. 28d)
		To check homogeneity	S-II	Behind or within for trans-illumination
C. Transparent Materials				
Clear material with specular surface	Bottles, glassware—empty or filled with clear liquid	To emphasize surface irregularities	S-I	To be directed obliquely to objects
		To emphasize cracks, chips & foreign particles	S-IV or S-V	Behind for trans-illumination. Motion of objects is helpful (Fig. 28e)

TYPICAL INDUSTRIAL LIGHTING INSTALLATIONS

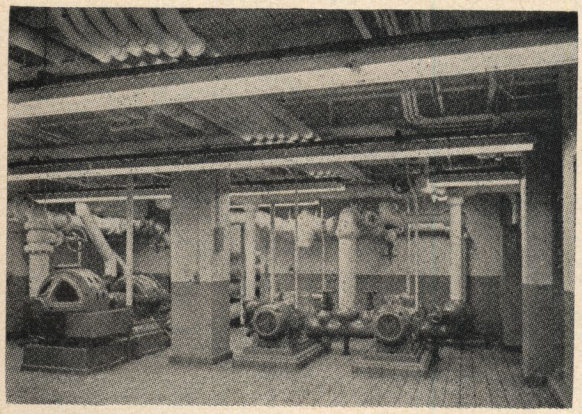


Figure 22. Pump room is approximately 20 x 25 feet with an 11-foot ceiling. Two-lamp, 96T12 reflectors are mounted 8 feet above floor in continuous rows, 8 feet on centers, with standard cool white fluorescent lamps providing 40 footcandles.

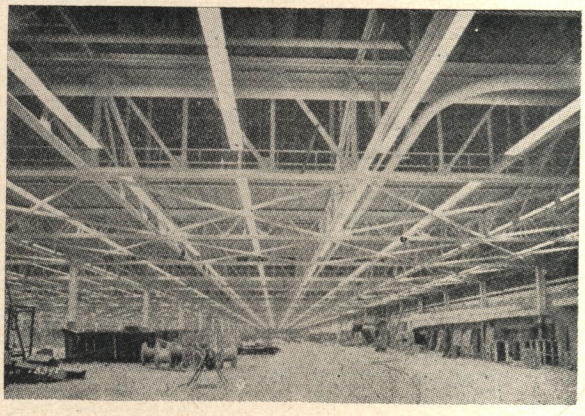


Figure 20. Aircraft plant uses 2-lamp, 40-watt standard cool white fluorescent lamps, mounted in continuous rows 25 feet above the floor, on 13½-foot centers, through the 600 x 1000 foot area. Average illumination is 30 footcandles.

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ILLUMINEERING INFORMATION

INDUSTRIAL LIGHTING EQUIPMENT
RLM STANDARDS INSTITUTE
SPECIFICATIONS



a new contribution to illuminating engineering progress

This 1955 RLM Specifications Book contains a complete compilation of all new and revised RLM specifications covering 46 different types and sizes of incandescent and fluorescent industrial lighting units. To assist you in interpreting these RLM specification advancements in terms of benefits, the following explanatory comments are given.

RLM Direct and Semi-Direct Fluorescent Lighting Units—When units have apertures such as are called for in the new RLM specifications for direct and semi-direct lighting units permitting from 5% to 30% of the light to be in the upper hemisphere, the following are some of the advantages which may be obtained:

1. The overall efficiency of the unit is increased 4-5% due to the cooling effect the apertures have on the lamp by permitting a circulation of air and by permitting lighting which would normally be trapped behind the lamps to be utilized in the upper hemisphere.

2. The chimney action prevents dust accumulation on the lamps as well as the reflectors, which maintains a higher efficiency of the unit between cleanings, thereby reducing maintenance and enhancing the appearance.

3. The brightness contrast between the unit and the lighted ceiling is improved by the light reflected from the ceiling back on to the outside of the unit, raising its brightness and reducing the contrast two ways, between the inside and outside of the unit, and between the outside of the unit and the ceiling, a vastly improved degree of comfort.

4. The improved appearance stimulates pride of ownership, with a resulting better housekeeping in the entire area.

Maximum Brightness—The brightness, a maximum of *40% of the brightness* of the bare test lamp, is integrated over one square inch by photometric test performed by the laboratory where the entire shielded zone is explored. The shielded zone is from the horizontal (90°) to 11½° below the horizontal in the case of direct lighting units and 25° below the horizontal in the case of semi-direct units.

These readings are taken perpendicular to the lamps and, therefore, would include brightness readings on the far side of the reflector and the longitudinal center shield if used. From experience, the maximum brightness is expressed as a percentage of bare lamp brightness rather than a specific number of candles per square inch because comfort is the degree of relative brightnesses in this area and other factors.

Better Shielding Angles—Reduces glare. In combination with brightness control, the greater the shielding angle, the better.

New High Reflection Factor—Improves efficiency of unit by reducing reflected light losses.

Higher Light Output—Increased efficiency is obtained by improved reflection factor of porcelain enamel and the wider spacing of lamps, which reduces the mutual heating effect. In the case of direct and semi-direct lighting units, there is a further increase attributable to the apertures.

New Captive Latching and Holding Devices—Prevents the loss of latches and holding devices when reflectors or ballast covers are removed, providing greater safety and greater ease of maintenance.

New Grounded Mounting of Ballasts—Provides greater safety from electrical hazards and optimum operation.

New Channel Constructed for Sliding Hanger—Makes easier, less costly installation and provides proper unit alignment.

Revised Lamp Spacing—Improves efficiency by reducing mutual heating effect of lamps and reduces the amount of trapped light by having lamps spaced farther apart.

New Lampholders—Lampholders are required to be of a depressible contact type either metal clad or with a metal back reinforcement. The spring-loaded lampholder permits easier and safer lamp installation and reduces lamp failures from vibration due to its shock absorbing action.

New Rust-Proofed Finish—Porcelain enamel is a rust-proofed finish. therefore, the balance of the unit, the channel, the ballast cover, lampholder case or metal backing, etc., is required to have a rust-inhibiting undercoating prior to finishing.

On the following pages 5 to 9 are to be found the answers to the most frequently asked questions concerning the RLM specification and certification program. Additional questions that you may have now or in the future are always invited.

Please address them to the RLM Standards Institute, Inc., 326 West Madison Street, Chicago 6, Illinois. The Institute is established for the single purpose of assisting specifiers, installers and buyers to obtain quality lighting units that meet RLM standards for performance, and the Institute is at your every service in the accomplishment of this end.

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SUMMARY OF FLUORESCENT UNITS PER MANUFACTURER CERTIFIED IN ACCORDANCE WITH RLM SPECIFICATIONS

FLUORESCENT UNITS Certified by RLM STANDARDS INSTITUTE

MANUFACTURER	TD-1 2-40W & 2-38W ABC		TD-1 2-75W D		TD-2 3-40W ABC		TD-2 3-75W D		TD-3 2-90W & 2-40W* AB	
	OPEN	CLOSED	OPEN	CLOSED	OPEN	CLOSED	OPEN	CLOSED	OPEN	CLOSED
Benjamin	x	x	x	x	x	x	x	x	x	x
Eastern	x		x		x				x	
Electro Silv-A-King	x	x	x		x	x	x		x	x
Ender-Monarch	x				x					
Fluores. Fix. of Calif.	x		x		x		x			
Globe	x	x	x		x	x	x			
Guth	x		x		x		x		x	
Keystone	x	x	x		x	x	x			
Leadlight		x	x		x	x	x			
Miller	x	x	x		x	x	x		x	x
Mitchell	x				x				x	
Ruby Lighting	x		x		x		x			
Ruby-Philite Corp.	x	x	x		x	x	x		x	
Smithcraft	x	x	x		x	x			x	
Smoot-Holman	x	x	x		x	x	x		x	
Sylvania	x	x	x		x	x	x		x	x
Westinghouse	x	x	x		x	x			x	
Wheeler	x	x	x		x	x	x		x	x
Work-O-Lite	x		x		x		x			
Zane	x		x		x		x			

MANUFACTURER	D-1 2-40W & 2-38W ABC		D-1 2-75W D		D-2 3-40W ABC		D-2 3-75W D		D-3 2-90W & 2-40* AB		SD-1 2-40W ABC		SD-1 2-75W D	
	OPEN	CLOSED	OPEN	CLOSED	OPEN	CLOSED	OPEN	CLOSED	OPEN	CLOSED	OPEN	CLOSED	OPEN	CLOSED
Benjamin	x	x	x	x	x	x	x	x				x		x
Day-Brite	x		x		x		x		x		x		x	
Electro Silv-A-King	x	x			x	x								
Ender-Monarch														x
Fluores. Fix. of Calif.	x		x		x		x					x	x	
Globe	x	x	x	x	x	x	x	x			x		x	
Guth	x				x									
Leadlight	x		x		x		x							
Miller	x	x	x				x							
Smithcraft	x		x		x		x							
Smoot-Holman	x		x		x		x				x		x	
Sylvania	x	x	x		x	x	x		x	x	x		x	
Westinghouse									x		x		x	
Wheeler	x	x	x		x	x	x		x	x		x		x

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U-89-L

INCANDESCENT UNITS
Certified by RLM STANDARDS INSTITUTE

BULLETIN 1055-3

RLM STANDARDS INSTITUTE, INC.
326 W. Madison St., Chicago 6, Illinois

AS OF SEPT. 30, 1955
X CERTIFIED WITHIN 18 MONTHS

SUMMARY OF INCANDESCENT UNITS PER MANUFACTURER CERTIFIED IN ACCORDANCE WITH RLM SPECIFICATIONS

MANUFACTURER	SPECIFICATION NO. 1 DOME WATTS					SPECIFICATION NO. 2 DEEP BOWL WATTS					SPECIFICATION NO. 3 SYMMETRICAL ANGLE WATTS				
	100	150	200	500	1000	100	150	200	500	1000	100	150	200	500	1000
Abolite	x	x	x	x	x								x		
Appleton	x		x	x	x	x	x	x	x	x		x			x
Benjamin	x	x	x	x	x	x		x	x	x	x	x	x	x	
Electro Silv-A-King	x	x		x		x	x			x	x	x			x
Miller	x	x	x	x	x										
Multi		x	x	x	x										
Overbagh & Ayres	x	x		x	x	x				x		x	x	x	
Quadrangle	x	x	x	x	x	x	x	x	x		x	x	x	x	
Smoot-Holman	x	x	x	x	x	x		x	x	x	x	x	x	x	x
Spero	x	x	x	x						x	x				
Westinghouse		x	x	x	x			x	x		x	x		x	
Wheeler	x	x	x	x	x	x	x	x	x		x		x		

MANUFACTURER	SPECIFICATION NO. 4 HIGH BAY WATTS		SPECIFICATION NO. 18 GLASSTEEL DIFFUSER WATTS			SPECIFICATION NO. 40 HIGH BAY WATTS	
	500	1000	200	500	1000	500	1000
Abolite			x	x		x	x
Appleton			x	x			
Benjamin			x	x	x		
Miller	x	x	x	x			
Multi	x	x	x	x		x	x
Quadrangle	x	x	x	x			
Smoot-Holman			x	x	x		
Westinghouse				x	x		

THE STANDARD OF UNIFORM QUALITY  IN INDUSTRIAL LIGHTING EQUIPMENT

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U-90-L

LIGHT SOURCES

Those light sources which have widespread application in industry may be classified under the general headings of incandescent, mercury and fluorescent. These light sources vary considerably in their physical dimensions, electrical characteristics, and operating characteristics

Table D-1.—General Service Lamps for 115-, 120- and 125-Volt Circuits.

WATTS	BULB AND OTHER DESCRIPTION	BASE	FILAMENT	RATED AVERAGE LIFE (hours)	MAX. OVER-ALL LENGTH (inches)	AVERAGE LIGHT CENTER LENGTH (inches)	APPROX. FILAMENT TEMP. (K)	MAX. BARE BULB TEMPERATURE (F)*	BASE TEMPERATURE (F)†	APPROX. INITIAL LUMENS	RATED INITIAL LUMENS PER WATT	APPROX. MEAN LUMENS DURING LIFE
10	S-14 inside frosted or clear	Med.	C-9	1500	3½	2½	2422	106	106	78	7.8	70
15	A-15 inside frosted	Med.	C-9	1200	3½	2⅜	—	—	—	141	9.4	121
25	A-19 inside frosted	Med.	C-9	1000	3 13/16	2½	2583	110	108	260	10.5	220
40	A-19 inside frosted	Med.	C-9	1000	4½	2⅞	2750	260	221	465	11.6	425
50	A-19 inside frosted	Med.	CC-6	1000	4 7/16	3⅛	—	—	—	660	13.2	620
60	A-19 inside frosted	Med.	CC-6	1000	4 7/16	3⅛	2772	252	195	835	13.9	785
75	A-19 inside frosted	Med.	CC-6	750	4 7/16	3⅛	2816	272	202	1150	15.3	1080
100	A-21 inside frosted	Med.	CC-6	750	5 5/16	3⅞	2849	261	201	1620	16.2	1520
150	PS-25 inside frosted or clear	Med.	C-9	750	6 1/16	5½	2872	290	209	2600	17.2	2400
200	PS-30 inside frosted or clear	Med.	C-9	750	8 1/16	6	2894	307	212	3700	18.5	3300
300	PS-30 inside frosted or clear	Med.	C-9	750	8 1/16	6	2936	374	173	5900	19.7	5250
300	PS-35 inside frosted or clear	Mog.	C-9	1000	9⅜	7	—	—	—	5650	18.8	5000
500	PS-40 inside frosted or clear	Mog.	C-9	1000	9¾	7	2944	389	213	9900	19.8	8700
750	PS-52 inside frosted or clear	Mog.	C-7A	1000	13 1/16	9½	—	—	—	15600	20.8	13400
1000	PS-52 inside frosted or clear	Mog.	C-7A	1000	13 1/16	9½	2994	480	235	21500	21.6	18000
1500	PS-52 inside frosted or clear	Mog.	C-7A	1000	13 1/16	9½	3037	510	265	33000	22.0	25500

* Lamp burning base up. Ambient temperature 77 F.
† At junction of base and bulb.

Table D-2.—Typical Cold-Cathode Instant-Starting Fluorescent Lamps.

	MULTIPLE OPERATED TYPE[b]			SERIES OPERATED TYPE[c]		
Lamp type	LP	LP	LP	HP	HP	HP
Nominal length (feet)	4	6	8	4	6	8
Lamp length (inches)[d]	45	69	93	45	69	93
Bulb diameter (mm)[e]	25	25	25	25	25	25
Base	Cap	Cap	Cap	Cap	Cap	Cap
Starting volts[f]	450	600	750	600	750	835
Lamp current (milliamperes)[g]	120	120	120	120	120	120
Lamp volts	250	330	420	270	360	450
Lamp watts[h]	26	34	42	28	37	46
Initial Lumens[i, j]						
Warm White	1100	1700	2300	1100	1700	2300
3500K White	1050	1650	2250	1050	1650	2250
4500K White	1000	1600	2200	1000	1600	2200
Daylight	950	1550	2150	950	1550	2150
Footlamberts						
Warm White	1160	1270	1310	1160	1270	1310
3500K White	1130	1240	1280	1130	1240	1200
4500K White	1100	1210	1250	1100	1210	1250
Daylight	980	1990	1230	980	1990	1230
Rated lamp life (hours)[k, l]	15,000	15,000	15,000	25,000	25,000	25,000

[a] Industry averages supplied by the Fluorescent Lighting Association. American Standards Association approved lamp sizes include 20 and 25 mm bulb diameters; lamp length end to end 52, 64, 76, 84 and 93 inches.
[b] May be operated in series if desired.
[c] May be operated in multiple on higher voltage ballasts.
[d] Overall length of lamp end to end. Add 3 inches to overall lamp length for overall dimensions to ends of sockets.
[e] 25 mm = approximately one inch (T-8); 20 mm = approximately ¾ inch (T-6).
[f] Minimum ballast or transformer volts.
[g] Lamp type LP can be operated at currents to 150 ma. Lamp type HP can be operated at currents to 200 ma.
[h] Wattage consumed by auxiliary must be added to obtain total.
[i] Initial rating (after 100 hours operation).
[j] Standard colors; other colors available.
[k] Lamp life independent of number of starts.
[l] Lumen maintenance at 7500 hours approximately 76%, at 15,000 hours approximately 68%; initial (100 hour) rating taken as 100%.

Each has its particular field of application and in many cases two or more sources are qualified to do any particular lighting job. In order to present the pertinent data on the lamps the following four tables taken from the *I.E.S. Lighting Handbook* are presented.

Presented by courtesy of the Illuminating Engineering Society

Table D-3.—Typical Hot-Cathode Fluorescent Lamps (Instant Starting).

Nominal length (inches)[b]	42			64			72			96			48	48		72		96		60
Bulb[c]	T6			T6			T8			T8			T12	T12		T12		T12		T17
Base	Single pin			Single pin			Single pin			Single pin			Bipin	Single pin		Single pin		Single pin		Bipin
Starting volts[d]	450			600			600			750			450	450		550		650		450
Lamp current (milliamperes)	120	200	300	120	200	300	120	200	300	120	200	300	425	427	600	425	600	425	600	420
Approx. lamp volts	175	145	130	270	225	200	240	220	200	320	285	265	105	99	95	150	137	194	175	107
Lamp watts[e]	18	25	33	27½	37	51	26	37.5	51	34	49	69	41	38.5	52	57	72	73	96	40
Rated life[f] (hours)	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000
Initial lumens[g]																				
White	1050	1400	1800	1650	2250	2850	1675	2375	3100	2225	3250	4300	2350	2350	3020	3660	4300	4600	5800	2350
4500K White	1000	1340	1700	1560	2150	2700	1600	2275	3000	2125	3100	4100	2200	2200	2870	3500	4100	4575	5540	2200
Daylight	900	1200	1530	1400	1900	2400	1400	2000	2650	1900	2750	3650	1950	1950	2570	3100	3660	4080	4925	1950
Footlamberts																				
White	1910	2550	3280	1900	2590	3280	1250	1770	2310	1250	1800	2380	1790	1830	2350	1845	2170	1790	2160	1035
4500K White	1820	2440	3100	1800	2470	3110	1195	1700	2240	1175	1720	2270	1675	1715	2230	1765	2065	1710	2070	970
Daylight	1640	2180	2790	1610	2190	2760	1045	1495	1980	1050	1520	2020	1485	1520	2000	1560	1845	1520	1840	860

[a] Industry averages. A.S.A. proposed dimensions and electrical characteristics used when available.
[b] Includes lamp plus two sockets.
[c] Figures indicate nominal outside diameter in eighths of an inch.
[d] Open circuit voltage at 118 volts line. 110 to 125 volt circuit ballasts available for all types.
[e] Wattage consumed by auxiliary must be added to obtain total.
[f] Average life under specific test conditions with three hours burning per start.
[g] Three standard colors shown, but other colors are available.

Table D-4.—Typical Hot-Cathode Fluorescent Lamps (Preheat Starting).

Approx. lamp watts[b]	4	6	8	13	13	14	15	15[c]	18	20[a]	25	30	32	40[a]	85[d]	90[d]	100[d]
Nominal length (inches)[e]	6	9	12	21	12	15	18	18	24	24	33	36	[g]	48	60	60	60
Bulb[h]	T5	T5	T5	T5	T8	T12	T8	T12	T8	T12	T12	T8	T10	T12	T17	T17	T17
Base (bipin)	Min	Min	Min	Min	Med	Med	Med	Med	Med	Med	Med	Med	4-pin	Med	Mog	Mog	Mog
Approx. lamp amperes	0.125	0.147	0.170	0.160	0.420	0.385	0.300	0.330	0.395	0.370	0.520	0.355	0.435	0.425	1.62	1.55	1.52
Approx. lamp volts	35	46.5	56	95	36	39	55	46	51	57	53	98	83	102.5	55	65	70.5
Preheat amperes—Max.	0.18	0.25	0.27	0.27	0.75	0.65	0.65	0.65	0.65	0.65	0.85	0.65	0.75	0.75	2.20	2.20	2.20
—Min.	0.13	0.16	0.18	0.18	0.45	0.44	0.44	0.44	0.44	0.44	0.65	0.40	0.55	0.55	1.40	1.40	1.40
Starting volts[i]	118	118	118	200	118	118	118	118	118	118	118	200	150	200	150	150	150
Rated Life[j] (hours)	7500	7500	7500	7500	7500	7500	7500	7500	7500	7500	7500	7500	7500	7500	7500	7500	7500
Lumen maintenance at 3000 hours[k]						76%	72%	79%		80%		74%		82%		82%	78%
Initial lumens:																	
White	73	210	330	582		490	650	600	710	980	1430	1560	1600	2400	4500	4860	4600
Cool White[l]		200	310	547		475	615	570		900	1370	1500		2250	4300	4600	4350
Daylight	68	185	295	505		430	570	525		820	1210	1400		2000	3900	4250	4000
Warm White[m]										1020				2480			
Candelite								540		840				2040			
Soft White						380	525	480		760		1260		1840	3400	3700	3500
Deluxe Cool White														1400			
Deluxe Warm White														1500			
Vis-A-Ray										980				2320			
Blue White														2140			
Blue							315	300		460		780					
Green							900	855		1300		2250					
Pink							300	285		440		750					
Gold							375	355		540		930					
Red							45	42		60		120					
Footlamberts:																	
White		2615	2870	2690		1410	2200	1360		1550	1630	2400	2040	1830	1980		2020
Cool White[l]		2490	2700	2520		1360	2080	1295		1420	1560	2310		1715	1890		1915
Daylight		2310	2560	2330		1235	1915	1190		1300	1380	2160		1525	1715		1760
Warm White[m]										1610				1890			
Candelite								1225		1330				1555			
Soft White						1090	1775	1009		1200		1940		1400	1500		1540
Deluxe Cool White														1068			
Deluxe Warm White														1143			
Vis-A-Ray										1550				1775			
Blue White														1615			
Blue							1065	680		730		1200					
Green							3040	1940		2050		3470					
Pink							1015	645		695		1150					
Gold							1270	805		855		1430					
Red							152	95		95		185					

[a] Industry averages. A.S.A. proposed dimensions and electrical characteristics used when available. Individual lumen ratings vary at present time.
[b] Wattage consumed by auxiliary must be added to obtain total.
[c] Actually rated at 14.4 watts.
[d] 85, 90 and 100 watt lamps interchangeable on same ballast.
[e] Includes lamp plus two sockets.
[f] Semicircular lamp 12 inches nominal outside diameter.
[g] Circular lamp 12 inches nominal outside diameter.
[h] Figures indicate nominal outside diameter in eighths of an inch.
[i] Open circuit voltage at 118 volts line. 110 to 125 volt circuit ballasts available for all types, higher voltage ballasts for some
[j] Average life under specific test conditions with 3 hours burning per start.
[k] Averages of White, Cool White and Daylight lamps.
[l] Also designated as 4500K White.
[m] Also designated as Warm Tint and Warmtone.
[n] Fluorescent sunlamps are available in lamps of these dimensions and electrical characteristics.

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NON-METALIC SHEATHED CABLE

a. When armored cable, types AC or ACL, is used as the wiring method, the provisions of the following paragraphs of this section shall be observed.

b. Armored cable shall not be used for systems of more than 600 volts nor where its surrounding temperature will exceed 120°F. (49° C.).

c. Type AC armored cable may be used for open or concealed work in dry locations and may be fished; when run on walls of brick or similar masonry it may be embedded in the plaster finish.

d. Wires of armored cables shall be of rubber-covered type. The armored cable shall carry a distinctive marker throughout its entire lenght.

e. Approved outlet boxes or fittings shall be installed at all outlets and switch points as required by paragraphs (a) and (b) of section 703. The cable shall be continuous from outlet to outlet, or from fitting to fitting, and the armor shall be mechanically and electrically connected to all fittings in a manner to substantially close the openings at entrance points and to hold the cable securely. The entire cable system shall be secured in place by approved fastenings.

f. When in exposed or concealed wiring, cable is run through bored holes in studs, joists or similar wood members, such holes shall be bored at the approximate center of such timbers and no less than two inches from the nearest edge, if their depth will permit.

g. When the cable is employed in accessible attics or roof spaces, it shall be installed as follows:

1. When run within five feet of the floor or floor joists, through bored holes in rafters or studs, or when run through bored holes in floor joists, cable shall be protected by substantial running boards extending at least one inch on each side of the cable or cables, and be securely fastened in place.

2. When within five feet of floor or joist, across the face of rafters or studding, or across the top or face of floor joists, cable shall be protected by substantial guard strips at least as high as the cable.

3. When carried along the side of rafters, studs or floor joists neither guard strips nor running boards shall be required.

h. All bends shall be so made that the armor of the cable will not be injured, and the radius of the curve of the inner edge of any bend shall be not less than five times the diameter of the cable.

i. At all points where the armor terminates, additional protection shall be afforded to the conductors by approved connectors or clamps so that the conductor will be adequately bushed.

j. Type ACL (having a lead sheath under the armor) shall be used in underground service runs and where other circuits are embeded in masonry, concrete or fill in buildings in course of construction, and elsewhere, if the location is such that the cable will be exposed to the weather or to continuous moisture or dampness.

l. Where alternating current is to be employed, all conductors of a circuit shall be contained within one armor except as provided in section 510.

It is recommended that in the case of direct current also all conductors of a circuit be placed within one armor, in order to obviate induction troubles if a change made to alternating current at a later date.

ARMORED CABLE

a. Cable shall not be used for circuits exceeding 300 volts between conductors nor 150 volts to ground.

b. Cable shall only be used for wiring in residence buildings, and in outbuildings on the same premises, or for the wiring of office or mercantile occupancies in residence neighborhoods, which individual occupancies do not require more than four branch circuits.

c. Cable shall not be installed in masonry, concrete or fill in buildings in course of construction, nor where exposed to the weather, nor in continuously damp or moist locations.

d. Cable shall not be of approved type, in sizes 14 to 4 inclusive and in two or three-wire assemblies and in addition shall have an approved size of non-insulated copper conductor laid in next to the insulated conductors to be used only for grounding purposes.

e. When employed for exposed wiring, cable shall be installed as follows:

1. Shall be mounted directly upon and unless substantial running boards are used, shall closely follow the surface of woodwork, plaster, cement, brick or other building finish.
2. Shall be secured between outlets with approved fastenings spaced at intervals not exceeding three feet.
3. Vertical runs shall be protected within five (5) feet of the floor by a rigid conduit or pipe, or a substantial wood or metal protecting strip, placed over the cable and securely fastened in place.
4. Horizontal runs within five (5) feet of the floor shall be protected as specified in paragraph (3) above, unless substantial protection is afforded by fixed furniture.
5. Where passing through floors or within 6 inches of floors, cable shall be protected by a length of rigid conduit or pipe passing through the floor, and extending at least 6 inches above the floor, in addition to the protection specified in sub-paragraph (3) above.

f. When employed in concealed wiring, cable shall be installed as follows:

1. In building under construction, shall be secured between outlets by approved fastenings spaced at intervals of not exceeding 4½ feet.
2. In finished buildings where impracticable to support the cable as specified in the preceding paragraph, cable may be fished from outlet to outlet.

g. Cable, exposed or cancealed, shall be run in continuous lengths, without joints, splices, or taps, form outlet box to outlet box, or other approved terminal fittings, and shall be secured thereto by means of approved devices which substantially close the openings. Approved outlet boxes or fittings as required by paragraphs a and b of section 703 shall be installed at all outlets and switch points. The grounding conductor shall be connected to the boxes or fittings by approved means.

h. Bends in cable shall be so made and other handling shall be such that the protective coverings of the cable will not be injured, and no bend shall have a radious less than five times the diameter of the cable.

i. Shall not be buried in walls, floors, or ceilings of plaster, cement, or similar finish.

j. When non-metallic sheathed cable is installed in conduit or in surface or underfloor raceways, the provisions of sections 503, 504, and 506 of this article shall apply as far as practicable.

k. When in exposed or cancealed wiring, cable is run through bored holes in studs, joists, or similar wood members, such holes shall be bored at the approximate center of such timbers and not less than two inches from the nearest edge, if their depth will permit.

l. Cable in accessible attics or roof spaces, shall be installed as follows:

1. When run within five feet of the floor joists, through bored holes in rafters or studs, or when run through bored holes in floor joists, cable shall be protected by substantial running boards extending at least one inch on each side of the cable or cables and securely fastened in place.
2. When within five feet of floor or joist, across the face of rafters or studding, or across the top or face of floor joists, cable shall be protected by substantial guard strips at least as high as the cable.
3. When carried along the sides of rafters, studs, or floor joists, neither guard strips, nor running bords shall be required

m. Cable in unfinished cellars or basements, if not run through bored holes in beams or floor joists, shall be run on the under side of running boards not less than ⅞ inch by 1¾ inches when run at angles with floor joists or timbers, or on sides or faces of floor joists or timbers when run parallel with them. 3-wire assemblies of cables larger than No. 8 run at angles with floor joists or timbers need not have the guard rails specified.

DATA FOR ELECTRIC HEATING CALCULATIONS

Correct application of the heater is just as important as correct selection, and depends mostly upon elimination of heat losses through radiation, convection and conduction. One of the important advantages of electric heat is that it can be applied almost exactly where it is required, with little heat lost in transmission. Radiation and convection losses from the material, machine or container can be reduced by efficient insulation of heated parts. Here again, the inherently simple construction of electric heaters facilitates application of the insulating material. Heat losses can also be calculated easily and accurately, and the applicable data is included for each type of material as follows:

Volume of cylindrical tank = Radius x Radius x 3.1416 x Length
1 gallon = 231 cu. in.
1 gallon of water = 8⅓ lbs.
1 cubic foot of water = 62.5 lbs.
1 kilowatt hour will raise temperature of 4 gallons of water 100° F.
1 kilowatt hour = 3412 B.T.U.

LIQUID HEATING

The most efficient method of heating any liquid is by direct immersion, since the heat is then applied directly to the material and losses can be held to a minimum. However, when obstructions within the container, nature of liquid or other special conditions prevent direct immersion, conduction type heaters may be clamped to the bottom and sides of the tank. Obviously, the heat losses of clamp-on applications are greater and such installations usually require a greater total applied wattage than immersion applications.

Characteristics and Heat Requirements of Common Liquids

Liquid	Specific Heat	Weight — Lbs. per Gal.	Weight — Lbs. per Cu. Ft.	Watt hours per Lb. per Deg. F. Rise
Alcohol	.65	7.4	55	.19
Glycerin	.58	10.6	79	.170
Oil (Machine)	.40	7.8	58	.117
Paraffin	.71	7.5	56	.208
Petroleum	.50	7.5	57	.149
Water	1.0	8.3	63	.293

To evaporate one pound of water at 212° F. requires 283 watt hours.

Total watthours or watts required to heat up in one hour equals:—Total weight in lbs. x degrees F. rise x watt hours per lb. per degree F. rise.

If two hours can be allowed use half this value. If only one half hour can be allowed, use double this value, etc.

EXAMPLE:—10 gallons of alcohol to be heated from 70° F. to 120° F. in one hour: 10 (gallons) x 7.4 (weight per gallon) x 50 (° F. rise) x .19 (watthours per pound per ° F.) equals 703 watts for heating the liquid.

To the watts required for heating the liquid should be added radiation losses as calculated below.

If objects are dipped into the liquid, determine the total weight of the material dipped per hour, its temperature rise, and add the heat absorption of these objects calculated on the basis of their weight per table No. 4.

Radiation Losses From Closed Tanks

Assuming three inches of good insulation on all surfaces of tank, the radiation losses will be .08 watts per degree Fahrenheit per square foot of exposed tank surface. (See table 7 for heat losses through insulated walls and savings effected by good heat insulation.)

FORMULA:—Temperature Differential between tank and room in degrees F. x square feet of tank area, x .08 equals watts radiation.

Add this to total watts required to heat material as calculated above.

Complete Wattage Requirements for Liquid Heating Applications include: Watts required to heat liquid, plus watts required to compensate for radiation from sides of tank and surface if open tank, plus Watts required to compensate for losses due to heat absorbed by any material dipped in the liquid, plus watts required to compensate for heat absorbed by container.

AIR HEATING

The convenient size, shape and construction of standard electric space heaters, makes them easily applicable to a wide variety of heating problems. Isolated rooms and buildings, portions of buildings, locations where no other heat will reach, can be heated conveniently and economically with electric heaters. They are also used for adding to inadequately heated rooms and for other unusual problems.

Calculation of the wattage required to heat any space must include the watts required to heat the air, heat absorbed by and lost thru the walls and heat lost through windows. The following data will be found valuable in calculating wattage requirements for many applications.

Assuming a required temperature rise of 70° F., with 12″ brick wall or equally good construction such as insulated double wood frame wall, total wattage required will be the sum of A, B and C as follows:

A = 0.35 watts per cu. ft. of room (to provide one complete change of air per hour).
B = 3.5 watts per sq. ft. of area of exposed walls, ceiling and floor.
C = 35.0 watts per sq. ft. of exposed window area.

For thinner brick or concrete walls or poor frame construction, some extra wattage must be added depending upon actual conditions, to compensate for greater heat losses.

EXAMPLE:—(All dimensions to be in feet).

Watts A = width x length x height x .35.

Watts B = (2 x width x height) + (2 x width x length) + (2 x height x length) — total window area) x 3.5

Watts C = Number of windows x width of windows x height of windows x 35.

Total watts required for 70° F. rise = A+B+C.

For higher temperature rise, multiply total watts by ratio between actual temperature rise and 70. For example, for 100° F. rise use $\frac{100}{70}$ x total watts as calculated above = final watts required.

Select the required number o fstandard 500 watt space heaters and mount them at advantageous locations throughout the room for uniform heat distribution. All heaters should be carefully mounted and connected, and if in an exposed location, they should be enclosed with a rigid screen or guard to prevent contact by persons or inflammable material. The heaters should preferably be mounted horizontally on edge and spaced at least 1¾″ apart.

Energy Required to Heat Air

Temperature rise in Degrees F.	Watts required per Cu. Ft. per Hr.	Temperature rise in Degrees F.	Watts required per Cu. Ft. per Hr.
70	.35	300	1.65
100	.55	400	2.20
200	1.10	500	2.75

MAGNET WIRE

All Copper Wire drawn for Magnet Wire purposes is thoroughly annealed by processes which insure uniform and extreme softness, highest conductivity and ease of handling. Before the insulation is applied, all wire is carefully inspected for size and uniformity of dimensions and to see that it is free from scale and all surface imperfections. We can furnish round, square or rectangular Magnet Wire.

We cover Magnet Wire with single, double or triple cotton or silk with enamel or double enamel and with asbestos and cotton and with paper. Our asbestos covered Magnet Wire is covered by a new process, by which the asbestos fibres are laid around the wire in such manner, that a perfect, dense layer of felted asbestos covering is obtained.

SILK COVERED MAGNET WIRE

Sizes	Single Silk Covered			Double Silk Covered		
	O.D. Inches	Approx. Lbs. per 1000 Ft.	Approx. Quantity On Reels Pounds	O.D. Inches	Approx. Lbs. per 1000 Ft.	Approx. Quantity On Reels Pounds
20	.0338	3.14	12.5	.0356	3.184	12
21	.0303	2.496	12.5	.0321	2.533	12
22	.0272	1.97	12	.0290	2.004	11.5
23	.0244	1.576	11.5	.0262	1.606	11
24	.0219	1.25	11	.0237	1.277	10.5
25	.0197	.994	4.5	.0215	1.018	4
26	.0177	.7865	4	.0195	.8085	4
27	.0160	.6297	3.5	.0178	.6477	3.5
28	.0144	.4975	3.5	.0162	.514	3
29	.0131	.4023	3	.0149	.4162	3
30	.0118	.3163	3	.0136	.3294	3
31	.0107	.2539	2.5	.0125	.2661	2.5
32	.0098	.2022	2.5	.0116	.213	2.5
33	.0089	.1622	2.25	.0107	.1723	2.25
34	.0081	.1301	2	.0099	.1397	2
35	.0074	.1043	2	.0092	.1138	2
36	.0068	.0837	2	.0086	.0936	2

COTTON COVERED MAGNET WIRE

Size	Single Cotton Covered			Double Cotton Covered	
	O.D. Inches	Approx. Lbs. per 1000 Ft.	S.C. or D.C. Approx. Quantity On Spools Pounds	O.D. Inches	Approx. Lbs. per 1000 Ft.
0	.333	321	200	.341	323
1	.297	255	200	.305	256
2	.266	202	150	.274	203
3	.237	160	150	.245	161
4	.212	127	150	.220	128
5	.190	101	150	.196	102
6	.170	80.2	150	.176	81.0
7	.152	63.6	150	.158	64.2
8	.137	50.4	150	.143	51.1
9	.120	40.1	150	.126	40.5
10	.108	31.8	150	.114	32.2
11	.097	25.3	150	.103	25.6
12	.087	20.1	150	.093	20.4
13	.078	16.0	150	.084	16.3
14	.070	12.6	50	.076	12.9
15	.063	10.1	50	.069	10.3
16	.0568	8.01	50	.062	8.19
17	.0513	6.37	50	.056	6.53
18	.0463	5.07	50	.051	5.21
19	.0404	4.01	12.5	.0464	4.15
20	.0365	3.20	12	.0425	3.32
21	.0330	2.55	12	.0390	2.66
22	.0298	2.02	11.5	.0359	2.13
23	.0271	1.62	11	.0331	1.71
24	.0246	1.29	10.5	.0306	1.37
25	.0224	1.03	4	.0269	1.11
26	.0204	.827	4	.0249	.891
27	.0187	.664	3.5	.0232	.722
28	.0171	.535	3	.0216	.587
29	.0158	.427	3	.0203	.477
30	.0145	.341	3	.0185	.389
31	.0134	.275	2.5	.0174	.319
32	.0124	.224	2.5	.0165	.263
33	.0116	.182	2.3	.0156	.219
34	.0103	.144	2	.0148	.179
35	.0096	.119	2	.0141	.150
36	.0090	.099	2	.0135	.129

ENAMELED MAGNET WIRE

Size	Plain Enameled			Enameled and Single Cotton Covered			Enameled and Double Cotton Covered		
	Approx. O.D. Inches	Approx. Lbs. per 1000 Ft.	Approx. Lbs. per Spool	Approx. O.D. Inches	Approx. Lbs. per 1000 Ft.	Approx. Lbs. per Spool	Approx. O.D. Inches	Approx. Lbs. per 1000 Ft.	Approx. Lbs. per Spool
16	.0524	7.88	60	.0578	8.095	50	.0623	8.265	50
17	.0469	6.26	60	.0522	6.461	50	.0567	6.617	50
18	.0419	4.97	60	.0471	5.136	50	.0516	5.272	50
19	.0375	3.95	13	.0426	4.094	13¼	.0471	4.203	13¼
20	.0334	3.13	13	.0385	3.270	13	.0430	3.369	13
21	.0299	2.48	13	.0350	2.613	12¾	.0395	2.705	11¾
22	.0268	1.97	13	.0316	2.069	12¼	.0361	2.155	11¼
23	.0238	1.56	13	.0288	1.662	12	.0333	1.738	11
24	.0213	1.24	13	.0261	1.324	11¾	.0306	1.397	10¾
25	.0191	.987	4½	.0238	1.060	3½	.0283	1.125	3
26	.0169	.781	4½	.0216	.843	3¼	.0261	.910	2¾
27	.0152	.621	4½	.0199	.680	3¼	.0244	.742	2¾
28	.0136	.492	4½	.0181	.540	3	.0226	.597	2¾
29	.0123	.397	4½	.0168	.441	3	.0213	.495	2½
30	.0109	.311	4	.0154	.351	3	.0199	.400	2½
31	.0097	.248	4	.0137	.281	2½	.0187	.328	2
32	.0087	.197	2	.0127	.227	2½	.0172	.270	2
33	.0078	.157	2	.0118	.185	2	.0163	.225	1½
34	.0069	.124	2	.0109	.149	2	.0154	.187	1½

USEFUL INFORMATION

COMPARATIVE RESISTANCES

Comparative resistances of various materials taking copper as 1.

To find the resistance of any wire, first get the resistance of the same length and size of copper wire, then multiply this by figure below for the wire used.

Copper	1	Advance	.28	Phosphor-Bronze	3.
Norway Iron	7	S. B.	.32	Platinum	5.5
Soft Steel	8	Climax	.50	Iron Wire (E. B. B.)	5.5
18 Per Cent German Silver	18	Silver	.98	Iron Wire (BB)	6.4
30 Per Cent German Silver	28	Aluminum	1.8	Iron Wire (Special)	7.4

18 Per Cent German Silver

Resistance per mil foot, 189 Ohms.

Temperature co-efficient .00017 per degree Fahr.

No. B.&S.	Ohms 1000 Ft.	No. B.&S.	Ohms 1000 Ft.	No. B.&S.	Ohms 1000 Ft.	No. B.&S.	Ohms 1000 Ft.	No. B.&S.	Ohms 1000 Ft.	No. B.&S.	Ohms 1000 Ft.
0	1.7	7	9.1	14	46.1	21	234	28	1192	35	6020
1	2.2	8	11.5	15	58.2	22	295	29	1480	36	7560
2	2.8	9	14.5	16	72.7	23	370	30	1890	37	9550
3	3.6	10	18.1	17	93.4	24	468	31	2386	38	12038
4	4.5	11	22.8	18	118.	25	590	32	2950	39	15240
5	5.7	12	28.8	19	146.	26	749	33	3740	40	19285
6	7.2	13	36.5	20	184.	27	936	34	4760	....	.....

Tensile Strength of Copper Wire

Size, Wire B.&S.	Breaking Wt., Lbs. Hand-Drawn	Breaking Wt., Lbs. Annealed	Size, Wire B.&S.	Breaking Wt., Lbs. Hand-Drawn	Breaking Wt., Lbs. Annealed	Size, Wire B.&S.	Breaking Wt., Lbs. Hand-Drawn	Breaking Wt., Lbs. Annealed
0000	9971	5650	5	1559	883	13	244	138
000	7907	4480	6	1237	700	14	193	109
00	6271	3553	7	980	555	15	153	87
0	4973	2818	8	778	440	16	133	69
1	3943	2234	9	617	349	17	97	55
2	3127	1772	10	489	277	18	77	43
3	2480	1405	11	388	219	19	61	34
4	1967	1114	12	307	174	20	48	27

Properties of Climax Resistance Wire

Resistance per mil foot at 75° Fahr.—525 Ohms.

Temperature co-efficient .0004 per degree Fahr.

Specific gravity, 8.137.

No. B.&S	Diam. In.	Area In Cir. Mils C.M.=D2	Resistance per 1000 Ft. at 75°F.	Wt.Lbs. Per 1000 Ft. Bare	Ohms Per Lb.	No. B.&S.	Diam. In.	Area In Cir. Mils C.M.=D2	Resistance Per 1000 Ft. at 75°F.	Wt.Lbs. Per 1000 Ft. Bare	Ohms Per Pound
1	.289	83521	6.2	231.	.026	21	.0285	812.3	646	2.24	284
2	.258	66564	7.9	184.	.041	22	.0253	640.1	820	1.77	456
3	.229	52441	10.	145.	.066	23	.0226	510.8	1027	1.41	720
4	.204	41616	12.6	115.	.105	24	.0201	404.	1290	1.12	1142
5	.182	33124	15.8	92.	.165	25	.0179	320.4	1640	.89	1810
6	.162	26244	20.	73.	.263	26	.0159	252.8	2080	.70	2920
7	.144	20736	25.3	57.	.427	27	.0142	201.6	2580	.56	4570
8	.128	16384	32.	45.	.685	28	.0126	158.8	3300	.44	7400
9	.116	12996	40.4	36.	1.08	29	.0113	127.7	4100	.35	11560
10	.102	10404	50.4	29.	1.65	30	.010	100.	5250	.276	18785
11	.091	8281	63.4	23.	2.70	31	.0089	79.2	6620	.219	29800
12	.081	6561	80.	18.	4.27	32	.008	64.	8200	.177	45265
13	.072	5184	101.	14.3	6.85	33	.0071	50.4	10410	.139	73214
14	.064	4096	128.	11.3	10.9	34	.0063	39.7	13220	.11	118300
15	.057	3249	161.	9.2	16.9	35	.0056	31.4	16720	.087	189000
16	.051	2601	202.	7.2	27.	36	.005	25.	21000	.069	300000
17	.045	2025	258.	5.6	44.5	37	.0045	20.2	26000	.056	468000
18	.040	1600	328.	4.42	71.3	38	.004	16.	33000	.045	733000
19	.036	1296	404.	3.58	108.	39	.0035	12.2	43000	.034	1264000
20	.032	1024	510.	2.83	174.	40	.003	9.	58000	.025	2320000

USEFUL INFORMATION

MELTING POINT AND RELATIVE CONDUCTIVITY OF DIFFERENT METALS AND ALLOYS

Metals	Relative Conductivity	Melting Point° F.
Pure silver	100.0	1873
Pure copper	100.0	2550
Refined and crystallized copper	99.9	.....
Telegraphic silicious bronze	98.0	.....
Alloy of copper and silver (50%)	86.65	.....
Pure gold	78.0	2016
Silicide of copper, 4 % Si	75.0	.....
Silicide of copper, 12% Si	54.7	.....
Pure aluminum	54.2	1160
Tin with 12% of sodium	46.9	.....
Telephonic silicious bronze	35.0	.....
Copper with 10% of lead	30.0	.....
Pure zinc	29.9	773
Telephonic phosphor-bronze	29.0	.....
Silicious brass, 25% zinc	26.4	.....
Brass with 35% zinc	21.59	.....
Phosphor-tin	17.7	.....
Alloy of gold and silver (50%)	16.12	.....
Swedish iron	16.4	4000
Pure Banca Tin	15.5	442
Antimonial copper	12.7	.....
Aluminum bronze (10%)	12.6	.....
Siemens steel	12.0	.....
Pure platinum	10.6	4100
Copper with 10% of nickel	10.6	.....
Cadmium Amalgam (15%)	10.2	.....
Dronier mercurial bronze	10.14	.....
Arsenical copper (10%)	9.1	.....
Pure lead	8.88	630
Bronze with 20% tin	8.4	.....
Pure nickel	7.89	2800
Phosphor-bronze, 10% tin	6.5	.....
Phosphor-copper, 9% phos.	4.9	.....
Antimony	3.88	840

CURRENT REQUIRED TO FUSE WIRES, COPPER, GERMAN SILVER AND IRON

B. & S. Gauge	Copper, Amperes	German Silver, Amperes	Iron, Amperes
10	333.0	169.0	101.0
11	284.0	146.0	86.0
12	235.0	120.7	71.2
13	200.0	102.6	63.0
14	166.0	85.2	50.2
15	139.0	71.2	42.1
16	117.0	60.0	35.5
17	99.0	50.4	32.6
18	82.8	42.5	25.1
19	66.7	43.2	20.2
20	58.3	29.9	17.7
21	49.3	25.3	14.9
22	41.2	21.1	12.5
23	34.5	17.7	10.9
24	28.9	14.8	8.76
25	24.6	12.6	7.46
26	20.6	10.6	6.22
27	17.7	9.1	5.36
28	14.7	7.5	4.45
29	12.5	6.41	3.79
30	10.25	5.26	3.11
31	8.75	4.49	2.65
32	7.26	3.73	2.2
33	6.19	3.18	1.88
34	5.12	2.64	1.55
35	4.37	3.24	1.33
36	3.62	1.86	1.09
37	3.08	1.58	.93
38	2.55	1.31	.77
39	2.20	1.13	.67
40	1.86	.95	.56

COMPARISON OF CENTIGRADE AND FAHRENHEIT THERMOMETER SCALES

Cent.	Fahr.	Cent.	Fahr.	Cent.	Fahr.	Cent.	Fahr.
0	32.0	26	78.8	52	125.6	78	172.4
1	33.8	27	80.6	53	127.4	79	174.2
2	35.6	28	82.4	54	129.2	80	176.0
3	37.4	29	84.2	55	131.0	81	177.8
4	39.2	30	86.0	56	132.8	82	179.6
5	41.0	31	87.8	57	134.6	83	181.4
6	42.8	32	89.6	58	136.4	84	183.2
7	44.6	33	91.4	59	138.2	85	185.0
8	46.4	34	93.2	60	140.0	86	186.8
9	48.2	35	95.0	61	141.8	87	188.6
10	50.0	36	96.8	62	143.6	88	190.4
11	51.8	37	98.6	63	145.4	89	192.2
12	53.6	38	100.4	64	147.2	90	194.0
13	55.4	39	102.2	65	149.0	91	195.8
14	57.2	40	104.0	66	150.8	92	197.6
15	59.0	41	105.8	67	152.6	93	199.4
16	60.8	42	107.6	68	154.4	94	201.2
17	62.6	43	109.4	69	156.2	95	203.0
18	64.4	44	111.2	70	158.0	96	204.8
19	66.2	45	113.0	71	159.8	97	206.6
20	68.0	46	114.8	72	161.6	98	208.4
21	69.8	47	116.6	73	163.4	99	210.2
22	71.6	48	118.4	74	165.2	100	212.0
23	73.4	49	120.2	75	167.0	.....	.....
24	75.2	50	122.0	76	168.8	.....	.....
25	77.0	51	123.8	77	170.6	.....	.....

Temperature corrections based on room temperature of 25° C. If the temperature of room during a test differs from 25° C., corrections should be made by changing the observed rise of temperature by one-half per cent. for each degree C. Thus with a room temperature of 35° C. the observed rise has to be decreased by 5 per cent., and with a room temperature of 15° C. the observed rise has to be increased by 5 per cent.

CONDUCTIVITIES

Metal	At 0° C. At 32° F.	At 100° C. At 212° F.
Silver	100.0	71.56
Copper, Hard	99.95	70.27
Gold, Hard	77.96	55.90
Zinc, Pressed	29.02	20.67
Cadmium	23.72	16.77
Platinum, Soft	18.00	.....
Iron, Soft	16.80	.....
Tin	12.36	8.67
Lead	8.32	5.86
Arsenic	4.76	3.33
Antimony	4.62	3.26
Mercury, Pure	1.60	.....
Bismuth	1.245	0.878

The Conductance of a piece of any Metal 1 Cm. Long and 1 Sq. Cm. in Cross-Section is called its Specific Conductance or Conductivity. Conductance is the Reciprocal of Resistance, and Conductivity is the Reciprocal of Resistivity. If the Resistance of 2 Cm. of a piece of any Metal having a Uniform Cross Sectional Area of 1 Sq. Cm. is 4 ohms, its Resistivity is 2 ohms, Conductance ¼ Mho (Ohm Spelled Backwards) and its Conductivity ½ Mho. Percentage Conductivity of a Substance is the Ratio of its Conductivity to that of the Standard at the same Temperature. The Conductivity of Matthiessen's Pure Copper at 0° C. is usually taken as the Standard, 100 per cent.

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